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By

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PREFACE

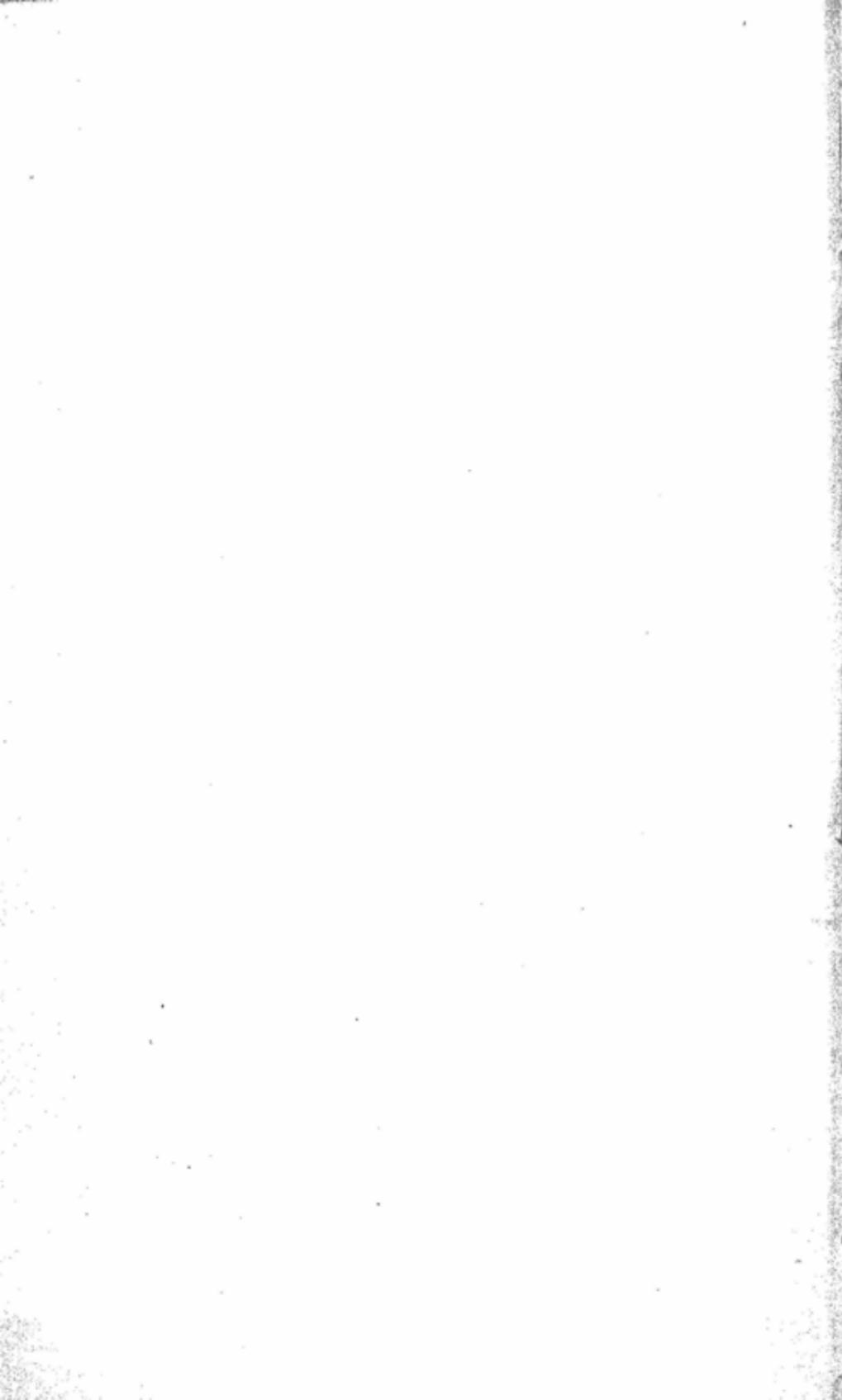
Whether warlike or not, the peoples of South-east Asia have traditionally devoted a great deal of time each year to warlike undertakings. The emotions of war being so different from those of peace, it may be expected that a study of South-east Asian warfare will reveal aspects of national character and of civilization different from, and sometimes deeper than, those which find expression in the better known exercises and arts of peace. Such a study should help to broaden our understanding of the peoples of South-east Asia and their problems through a fuller knowledge of their cultural background.

As is by no means the rule when one attempts to investigate the history of institutions, we are fortunate in having considerable wealth and variety of documentary material from which to trace the development of South-east Asian warfare: besides the survival of ancient forms amongst living peoples, we have, for great parts of our area, dated epigraphical and sculptural (bas-relief) evidence, in addition to literary sources. It is rather surprising, therefore, that the subject has hitherto received so little attention, and none at all from the comparative standpoint.

My thanks are due to Luang Boribal Buribhand for kindly arranging to have certain MSS. in the Bangkok National Library photographed for me; also to U Thein Han for information concerning the works of the Burmese judge Letwethondara, and to Dr. Hla Pe for kindly helping me to evaluate them. My wife has read the manuscript and proofs, and made helpful suggestions.

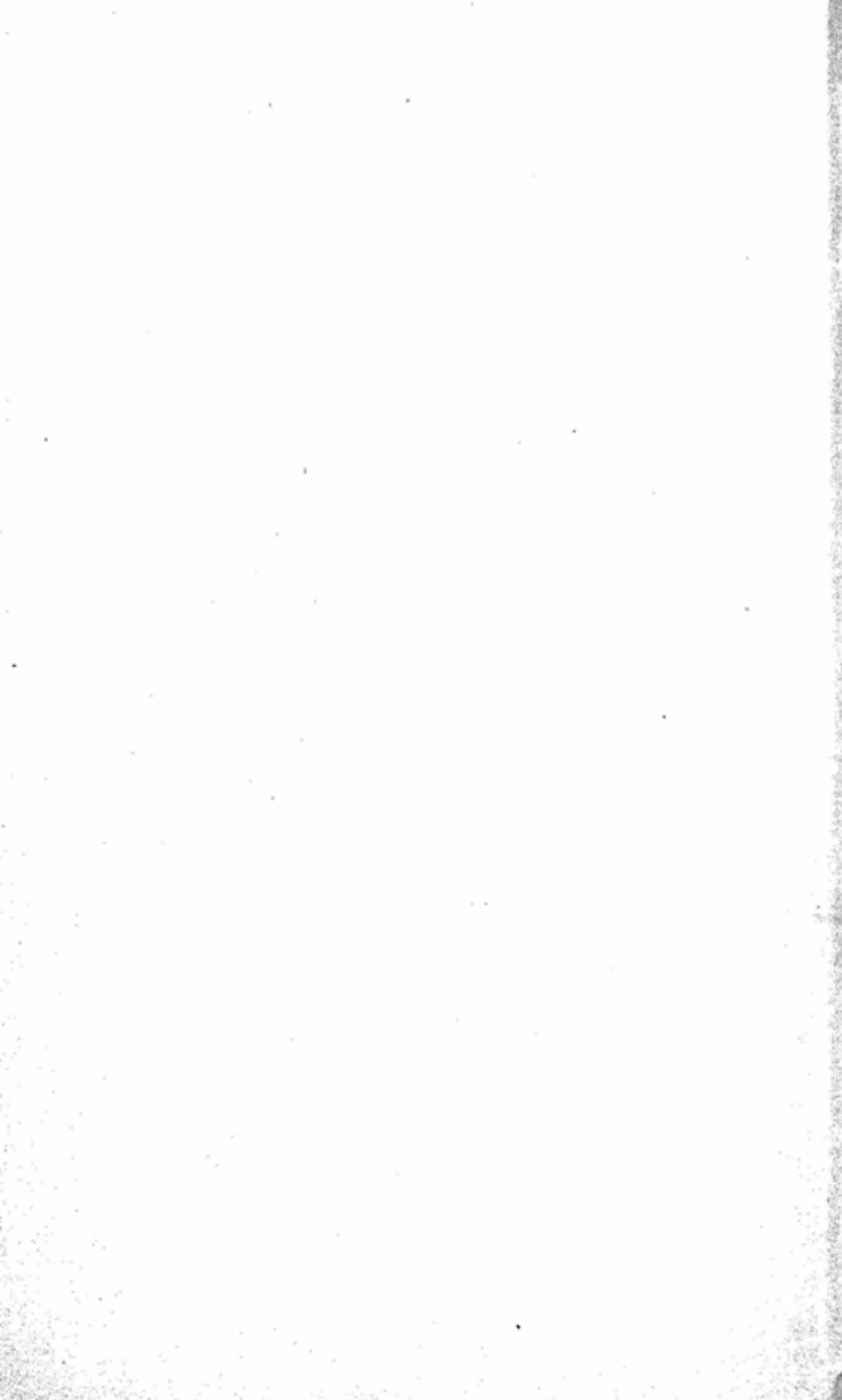
H. G. Q. W.

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ABBREVIATIONS

- AA* : *Annals of Ayuth'ya.*
BEFEO : *Bulletin de l'École Française d'Extrême-Orient.*
JBRS : *Journal of the Burma Research Society.*
JGIS : *Journal of the Greater India Society.*
JISOA : *Journal of the Indian Society of Oriental Art.*
JRASMB : *Journal of the Royal Asiatic Society, Malayan Branch.*
JSS : *Journal of the Siam Society.*
KCKP : *The Story of Khun Chang Khun Phan.*
RAA : *Revue des Arts Asiatiques.*



CHAPTER I

PRIMITIVE WARFARE

The early Môn-Khmer and Malayo-Polynesian speaking peoples, whose civilization forms the basis of that of the main population groups of South-east Asia to-day, probably entered the sub-continent from the north-west between 2500 and 1500 B.C. Beyond the finding of stone arrow-heads and axes, we have no direct knowledge of the warfare of these early peoples, though it is generally considered that head-hunting must have been one of their culture traits. Consequently we must begin our study by examining the warfare as practised, or until recently practised, by those of their non-Indianized descendants whose original culture has been little changed by the passage of time.

This method has been found rewarding in art history and is one which we may confidently apply to the study of ancient warfare. Furthermore, we shall find some confirmation in the Dong-So'n evidence, to be examined at the end of this chapter, that this was indeed the kind of warfare in vogue in the fourth century B.C., well before the arrival of Chinese or Indian influences. Even if the reader is mainly interested in the more advanced civilizations of South-east Asia, he will find it of value to know something of the primitive basis on which the Chinese and Indian influences were brought to bear.

The people of South-east Asia that I have chosen for study as representative of those among whom the basic civilization still largely survives, are the East Torajas of Central Celebes, with occasional reference also to the very similar West Torajas. Nevertheless, it is not

primarily their greater degree of purity of culture that caused me to select the Torajas, for I have no doubt that the warfare of such peoples as the Khasis and the Môn-Khmer tribes of Western Burma, as well as the peoples of Borneo (the Batak of Sumatra show too many traces of Indian influence to be trustworthy), remains essentially primitive. Put bluntly, the reason for my choice is this: As compared with the great works of the two Dutch missionaries, Dr. N. Adriani and Dr. Alb. C. Kruijt,¹ the material on war provided in the works of other anthropologists I have perused is relatively meagre. This is partly due to the different conditions under which they worked, and partly because it was often already too late to study the native fighting when their researches were made.

What I have gathered from works on other peoples is sufficient, however, to convince me that the picture we gain from the Torajas may be regarded as having applied pretty generally. Certainly at no time or place can we be sure that civilization remained completely static. There must have been local developments, and also some cumulative loss of culture, which must lead to some variation in detail. Similar considerations have to be borne in mind when we regard the picture as broadly representing the warfare of the ancient people, with the additional one that few peoples in this region can have remained completely impervious to certain widespread revolutionary loans in the sphere of material culture, such as the substitution of iron weapons for stone ones, either direct or through the intermediary of bronze. On the other hand the most severe cultural loss was probably incurred by the higher religious ideas formerly associated with the primitive civilization.

The summarized survey of Toraja warfare that I give

¹ N. Adriani and Alb. C. Kruijt, *De Bare'e Sprekende Toradjas van Midden-Celebes (De Oost-Toradjas)*, Amsterdam, 2nd ed. 1950; Alb. C. Kruijt, *De West-Toradjas op Midden Celebes*, Amsterdam, 1988.

here, and which I believe presents a fair picture of primitive South-east Asian warfare generally, does not give a tithe of the detail collected by the indefatigable Dutch authors. In particular I have only thought it necessary to give a few examples of the accompanying divinations (whether deliberately sought or, as omens, regarded as a warning from the gods), and of the numerous war tabus. Such material is liable to become monotonous.¹

(1)² Although Toraja warfare seems to have been basically connected with the need to obtain heads for ritual use, actual causes of war included disputes about claims over slaves, buffaloes or land, non-payment of fines inflicted by one village on another, vendettas and feuds. (4) War parties varied in number from a party of ten or twelve to a couple of hundred when a famous chief collected followers from several clans. The former could attack only an isolated house, the latter a village. The young men were encouraged by the women, and those young men unwilling to go were the subject of mockery. (6) The accusation : This was necessary and, since war was regarded as a trial by ordeal, if defeat resulted, the inference was that the accusation had been unjustified. An accusation was needed in order to gain the co-operation of the ancestor gods, and it also had the power of a curse. If one clan wanted to steal another's cattle, but had no accusation to offer, it in some way irritated the intended enemy into offering an insult which could then be used as a basis for an accusation.

(8, 9) Declarations of neutrality, definite alliances

¹ Whether it is positive magic (imitative or contagious) or negative magic (tabu) they follow the widespread principle of association of ideas, the fallacy being the premise that *supposedly* like causes produce like effects. For more on this underlying principle, Hastings, *Encyclopedia of Religion and Ethics*, art. "Divination" and Frazer's *Golden Bough* (*The Magic Art*) may be consulted.

² The numbers refer to sections in chap. vi, of *De Bare'e Sprekende Toradjas*, part i, 2nd ed., 1950, except where reference is specifically made to Kruyt's work on the West Toradjas.

among the villages, and the asking of help in case of attack, were all customary, and were regulated by certain formalities. But as these may be considered as primitive diplomacy, rather than as warfare, we shall not consider them here.

(10) There was no armour of hide or rattan (as there was among the South Torajas). But some men wore a war hat of rattan or made from a calabash, ornamented with copper-plated horns, and shields were used. The weapons consisted of sword and spear, the former being especially dangerous in their hands. (11) The sword was chosen for its supposed lucky qualities, arrived at by divination. (12) In former times a man seldom was seen without his spear. This was thrown at the enemy, but he also had a shorter one for hand-to-hand fighting. The shield was long and narrow. (14) The bow was not used, even in play. But, apart from the finding of old arrow-heads of stone, evidence of its former use is provided by the language and by certain survivals in ceremonial.¹

(15) The *tadoelako* : This is the Toraja word for an important dignitary, a word which I shall translate as "leader", it being understood, however, that his functions combined the priestly with the military, while in action his position of leadership was in the rear. His authority rested primarily on his ability to understand the indications provided by the ancestor-gods. Since he appears to have been regarded as a mystic link with them, to disobey him was to disobey the gods. Not courage, but understanding of the omens, was demanded

¹ Presumably, like the great majority of the peoples of South-east Asia, even after Indianization, they formerly had the blowpipe and poisoned darts (Adriani and Kruyt, op. cit., pt. 3, p. 370); but this has in most places gone out of use in war in recent centuries. Crawfurd, writing in 1820, said that the Balinese were the only more civilized people of the Archipelago to retain the use of the blowpipe and poisoned darts (*History of the Indian Archipelago*, vol. i, chap. 3). Probably, with the discovery of antidotes, and the difficulty of keeping the poison fresh, they were given up as ineffective in war.

of him. Sometimes there was a second leader who did lead the assault, but only the first leader was in touch with the gods. He remained in the advance camp from which, as we shall see, the attack started, together with those warriors who had been warned in dreams during the march that they would be killed if they fought. Here he looked after the welfare of the warriors by continually repeating the accusation, this being supposed to deprive the enemy of their courage. His duty was to care for the lives of the men, while the second leader was concerned with securing the death of the enemy. (16) Leaders, who in many cases had worked up from slaves, were greatly respected. They also got the blame if unsuccessful.

(17) A leader was forbidden to eat certain foods on the warpath because he had to keep his power concentrated, and some foods were considered magically dangerous. On approaching the enemy country he must avoid certain everyday phrases in conversation.

(18) The leader's task : First he had to select the new youths for war, testing them to find out whether they will be killed or not. One method was to poke his finger in the boy's eye. If he saw no sparks he would be wounded or die. He cast lots over them and he dreamt about them. If he saw any of the young men in a dream covered with ants, that one must not go. The leader conducted a successful recruit to the river, and then threw water over him to get him to absorb two practical points : to keep his eyes open in enemy country, and never to try his luck alone away from the troop. Later, when on the march, the leader inspected his men more closely. If he saw now and then something shining on a man's head, or someone's face appear greyish-yellow, those men must not go beyond the advance camp or they would be killed. The leader always had to be on the look out for bird cries and other signs. He had to go to bed early and rise early in order not to miss the

early birds. Whenever he got a bad omen, he must avert it by saying "that applies to the enemy, not to us". If a sound of tramping feet seemed to proceed from his troop towards the enemy and then to return, that was favourable, but the reverse was a bad sign.

At night the leader went a couple of times to listen to the noises made by his men in their sleep. Bad signs indicating that the sleeper must not be allowed to fight were snoring as though it were one's last breath, making a buzzing or hissing noise in sleep, or stretching and groaning. A light glowing from a man's form was unpropitious, but if it glowed only from his sword that would be excellent. The leader, as on the warpath they approached the enemy country, must also train his men with sham fights. (19) As reward for his service the leader got a share of the loot taken by his men.

(20-23) The String of Shells : As a war talisman a string of sea shells was consecrated in the village temple. It was believed to bring with it the ancestor-gods who assured victory to the warriors. It must only be carried by a brave man, partly because he would be most able to feed it when it was hungry, i.e. provide it with a corpse, partly because it was a great prize for the enemy. Capture of the talisman meant capture of the gods, with the consequence that the warriors would lose strength and courage.

(25-28) The warrior's amulet : This was made of a string of iron, copper or shell rings with such magically powerful objects as teeth of apes, crocodiles, snakes, and bezoar stones. It was sometimes considered to have been given by a spirit.

(29) War medicine : This was made from the wood of a tree that had been struck by lightning or from weeds grown on a grave at the level of the corpse's mouth. Another kind was obtained from the tip of the tongue of a new corpse, or the little finger of a stillborn or short-lived child cut off at night. This war medicine

was given out by the leader on the day the enemy was to be attacked. It was generally intended to weaken the enemy. Usually the warriors chewed it, but some only put it on their foreheads owing to a belief that it would make them toothless. They also put it on the enemy's path in order to deprive them of their courage. War medicine of various kinds was also applied to weapons to make them effective against anyone who might have made himself invulnerable, also to render oneself invisible.

(30) Choice of a good day : Since this depended on past experience, and was not the same in every case, a leader would deliberate with previous leaders. New moon days were usually considered good, but otherwise days that had proved lucky in the past were chosen.

(31) In the days before the start much attention was devoted to dreams, in which coconuts largely figured. If a man dreamed he was carrying nuts he would take an enemy head. If one let nuts drop from the top of a tree and no one came for them, he would be successful, but if anyone came, the dreamer would lose his head. Lucky dreams were those in which you were fetching something, or in which you were washing the vermin out of some stranger's head or shaving it. If you dreamed you were covered with blood that meant you would get a head, for the blood had dripped from the head you were carrying. If you were followed or charged by a buffalo that meant death ; but it was lucky to dream you were at a feast at which a buffalo was slain. A bad dream before starting meant, either that a man must get a priestess to free him from it, or he must stay at home. On the warpath it meant that the dreamer must immediately report to the leader who took measures to protect him from the consequences. These might entail leaving him at the advance camp.

(32) The preparations : Besides the ordinary food

which had to be carried on the back, enough for each day, some specially husked rice had to be taken in a palm leaf by each warrior. This was carefully husked by the wife or mother at dead of night, care being taken not to awaken any animal which might then cry out. She must also carefully bind her hair to guard against any hairs falling into the rice. The reason for this precaution is that in this special rice the enemy's soul was to be cooked before the attack, and any woman's hairs in it would endanger the safety of the whole village. Broken grains must be removed, for these would cause the warrior's neck to be broken (he would lose his head). Various other tabus were observed, e.g. the palm leaf bag must not be bound with rattan as this would have the effect of restricting the warrior's movements.

(33) The protective gift : Before going on the war-path each warrior asked his wife or a girl friend to give him a present of something she had used, such as jacket, collar, betel box, etc. If he returned with success he placed the object in a little basket in the temple, together with a chip of his enemy's pericranium. He gave the girl a part of any loot he had obtained in the fight in token of thanks ; and he received from her a basket with rice and eggs. These assured that his soul had returned with him from the enemy land.

(34-36) Various auguries were obtained from an egg and from a dog. The ash of the roasted egg and the dried heart of the dog that had provided encouraging signs were taken with the troop to be used as will be shown later.

(40) Leave taking in the temple : The leader went with his men to the temple shortly before departure, in order to acquaint the ancestor-gods with their intention, state the cause, and ask their help. At the same time offerings were made. It was a good sign if the centre pole of the temple moved or made any sound. Then the warriors sat facing the east beneath a white canopy,

while a priestess recited her litany. Then she gave each man a packet of magic herbs. He rubbed himself with this from head to foot, believing that it helped him to come to grips with his foe and strengthened his spears. The temple was then closed and might not be entered by anyone while the troop was absent. If any noise was made inside, it was believed that the spirits would return and the warriors be left unaided. The men had implicit belief in this supernatural aid. They ascribed any fortunate spear or sword thrust to the direct action of a spirit rather than to their own ability. Although they themselves could not see their ghostly allies, the enemy saw and were frightened.

(41) The departure of the troop : They had to set forth as soon as they had informed the supernatural powers. However they might stay in a hut outside the village during the absence of the leader who went forward two or three days' journey to collect omens from the behaviour of birds. (42) The cries of birds and the directions of their flight provided omens which were classified in minute detail. But many of the inauspicious signs did not delay the departure of the troop because the leader took medicine with him with which to avert the evil. He chewed it and rubbed the saliva on his sword, or he spat it at a tree on which a bird had sat when it uttered the ill-omened cry.

(43) Besides the leader's attention to bird cries, once the march had started, the behaviour of animals was noted too. If apes cried as the troop neared them and then ran towards the enemy, it was unlucky ; but if they let their cry be heard from afar and did not flee when the warriors drew near, that was fortunate. If the troop met a dead animal, such as a mouse, on the path, they must halt on the spot. To ignore the sign would mean either than one of the men would be killed or a villager left behind would die. Natural phenomena were also observed. An earth tremor coming from behind and

moving towards the enemy was good, and vice versa. But the omens caused only temporary halts.

(44) As much time was lost in halts of this sort only short distances were covered each day. Food stocks were soon exhausted, especially as some must be kept against the days when the men would be attacking the enemy. So on the march they had to depend largely on edible fruits and roots, with some hunting if they had dogs with them. Naturally prognostications were made from the success or otherwise of the foraging.

(45) Life at the advance camp : The troop made its headquarters at a suitable distance from the enemy, building a special hut for the leader and a long house for the men. They stuck their spears in the ground in front of the leader's hut, so that he might have them under constant observation for any omens, e.g. to see if a bird perched on any of them. Almost every common act of daily life in the camp had to be carried out in such a way as to avoid any inauspicious suggestion. Thus firewood might not be carried in over the shoulder from the direction of the enemy, for this called to mind the carrying in of dead or wounded after battle. A faggot might not be pushed so far under the cooking pot as to stick out on the other side, as then the enemy's spear would pierce a shield and wound a warrior. And so with other tabus throughout all the cooking processes. Often mustard seed was thrown before the huts, imitative magic for scattering the foe.

(46) Various considerations on the march : Angry words must not be used for fear of offending the tree spirits. A man must not touch a comrade's back, for then the latter would be followed by an enemy. He must not poke him with his finger in the side, for then would the man be benumbed with fear when he entered battle. A leaf falling on the leader and then to the ground with its upper side down meant that the troop must halt overnight on the spot. Disregard of the warning would

mean that the men would also fall upside down, i.e. be killed. A branch breaking off a tree when on the march was not so serious as if it happened when eating in camp : this showed a man would be wounded. No one might amuse himself with catching *tandaa*, an insect with a red body, for if he did he would later be smeared with his own blood.

(47) The villagers left at home : The women were considered to remain closely connected with the men through the medium of the protective gifts, and hence it was of great importance that they behaved in such manner as would aid the men. Needless to say they must have no relations with other men, or their husbands would die. A woman must not sew, for if she pricked her finger her husband would be wounded. She must not sit with her legs stretched in front of her, but tucked up beneath her, so that she could stand up instantly, just as her man must be ready to do. If about to cook rice, she must not pour it from a basket into the pot, but must ladle it from the basket with her hand into a coconut shell, and thence pour it into the pot, so that the enemy would not be able to approach the warriors easily or unnoticed. These are but a few examples of the minute regulations designed to secure favourable influences through the protective gift.¹ Signs of possible significance as to the progress of the campaign were also carefully sought by those left at home. Thus a woman might think she heard the sound of drums in the empty temple, this signifying that the troop was going into combat. If the men were away several months and nothing was heard of them, a priestess must visit them in spirit and see if they are in need or are sick. In that case she had to try to help them with her incantations.

(48) The scouts : When the advance camp had been established only half a day's march from the enemy,

¹ Compare similar war tabus in force among the Dusuns, I. H. N. Evans, *Among Primitive Peoples in Borneo*, London, 1922, p. 163.

from two to seven men were sent forward as scouts. These were to spy out the enemy's strength, observe whether they were careless or on their guard, at what times they went to and returned from the fields, and the relative position of these. An eye was kept open for any omens which might indicate chances of success. (49) A further task of the scouts was to bury the ash of the charmed egg and the dried dog's heart at some place such as the village gate, where many of the enemy would be likely to walk over them. The magic of these objects would help to compass the destruction of those who walked over them. (50) On their return to camp the scouts reported to the leader.

(51, 52) On a day he considered fortunate, after the return of the scouts, the leader with complicated ritual called on the souls of the enemy to enter the special rice that had been brought for the purpose. This rice was then cooked in some bamboo containers at dead of night, with the usual attention to omens. The leader then served out the rice in which the enemy's souls had been cooked. The men ate some of it in camp, keeping some to be eaten on the way to battle. The leader then threw the leaves that had enclosed the eaten portion in the direction of the enemy, making a cut with his sword in the air while he remarked that he was cutting through the enemy as though they were a banana stem. Sometimes the leaves were placed in a niche cut in a little tree, and some one would say, on slashing at the tree, "I have cut you in the neck." (53) The men who had had inauspicious dreams and so could not fight were left to guard the advance camp. In addition, some brave men are also left at the camp, the object being that if the main body was long away a relief expedition could be sent out.

(54) Lying in ambush : If the scouts reported that a village was well protected,¹ and the defenders numerous and watchful, the decision would probably be taken not

to attack it but to lie in ambush on one side of the path along which the people must go to the fields. Alongside this path the troop was divided into three parties, the leader staying with the central one. In times of unrest it was usual for the workers to go to the fields well guarded, women and children in the middle, armed men in front and rear. The tactics were to attack separately these three divisions as they passed the three parties of invading warriors. Thrown into confusion, the advance guard would be likely to run further towards the fields, while those in the rear ran back to the village. But the attackers had to make hay while the sun shone for the rearguard would soon bring reinforcements from the village.

On occasion, at least among the West Torajas,² tactics very different from the above were employed. Here, in some areas, the custom was for a pitched battle to be fought in the open field, day and place being arranged. In such cases the idea of war being a trial by ordeal was most plainly developed, and few men were killed. Sometimes, moreover, the leaders met in single combat, the party of the winner being acknowledged to be in the right.³

(55) The more usual alternative to lying in ambush was to storm the village at dawn, after an approach during the night. This plan was used if the scouts had

² Toraja villages are usually situated on a hill and surrounded by a bamboo stockade. This does not by any means represent the best that could be done, even in modern times, especially by those peoples of basically megalithic culture amongst whom the use of stone was still most active. Compare, for example, the hill fort of Konomah, in *The Angami Nagas*, by J. H. Hutton, pl. facing p. 155; or the formerly impregnable strongholds of the Wild Wa (*Gazetteer of Upper Burma and the Shan States*, vol. i, pt. i, pp. 503-4). Where island peoples like the Dusuns of Borneo came in contact with coast Moslems they learnt other methods of fortification (O. Rutter, *The Pagans of North Borneo*, 1929, p. 209).

³ Kruijt, op. cit., p. 148.

⁴ It is probably in such ceremonial combat as this, here reduced to almost relic proportions, that Toraja warfare has suffered most cultural loss because this form of war was most expressive of the higher religious ideas.

reported that the bamboo stockade was dilapidated, or the people careless enough to leave the gate open when they had gone to the fields. But if the place could not thus be taken unawares, it would be necessary to try artifice. A pair of men unknown to the villagers would approach the gate peacefully and, while they were talking there, the rest of the men would come up unnoticed and smash their way in. Or one warrior might climb the stockade at night, open the gate, and let the rest in. These would then dispatch the villagers in their sleep.

(56) Besieging a village : A careful chief kept his village well defended with chevaux-de-frise, trellis work which let down an avalanche of big stones on the pulling from within of rattan cords, and covered pitfalls with sharp bamboos at the bottom, the position of which were known only to the inhabitants. In the case of such a well protected village there had to be a regular siege. The besiegers made their own fenced camp and advanced it nearer to the foot of the village hill each night, a movement which in itself tended to intimidate the enemy. On the other hand, an assault with the object of breaking in the gate was met by a volley of spears, a cascade of stones, and a shower of blinding ash. In night sorties the besieged sowed fields of sharply pointed bamboos (caltrops) in the grass, changing the position subsequently. A common stratagem was the feigned retreat and ambush, the invaders sending forward at first only a small proportion of their strength. These, on being repulsed and pursued, led the enemy into the ambush. Or the enemy might be invited to send out a small party to talk matters over, in the course of which parley they would be treacherously murdered.

(57) Since Torajas were not particularly brave, and their favourite tactics were to stalk without personal risk, storming villages was not greatly to their liking. A warming mixture of spices and pericranium was a

help, as also was the sound of drums, the latter also being effective in discouraging the enemy. During an attack each warrior trod carefully in the footsteps of the man in front in order to avoid traps. But when it came to hand-to-hand fighting within the village much fury was displayed. And tales of personal bravery are told of men who scaled the fence or burrowed under it to open the gate to the attackers. No tricks were banned; and a Toraja commonly began by flinging a handful of ash in his immediate opponent's eyes. If a village chief went to war he remained surrounded by a bodyguard, and like the leader, he must remain in the rear encouraging the others. The loss of either chief or leader would greatly encourage the enemy.

Of the West Torajas it is recorded¹ that they sometimes attacked in a definite battle formation. This had a centre and wings; in one example given the centre was composed of thirty men, the wings of seven men each. A body of less brave men was held in reserve.

(58) The women in the besieged village had much influence on the spirit of the defence, through their encouragement of the men. In individual cases stories are told of women showing great courage. (59) The attacking warriors (lacking such immediate feminine encouragement) were always in danger of becoming so bewildered with fear that they did not know what they were doing, and fell an easy prey to the enemy. The leader tried to bring anyone taken thus to his senses, shaking him or pricking him with a sharp bamboo.

(60) Lack of water rather than of food was a big threat to the besieged. This was especially so if much water had been used in quenching burning brands thrown in by the attackers. At night men slipped out to the stream to get water, the village leader first putting to sleep the invaders by means of his charms. In actual fact the besiegers could seldom watch the village closely

¹ Kruyt, op. cit., p. 137.

enough to prevent people getting in or out at night. Some took advantage of this circumstance to escape at night; and if the chances were thought particularly good, the opportunity was deliberately taken to send off the aged and children. When the attackers succeeded in entering there was a general *sauve qui peut*. Some might escape and run to friendly villages. Those who could not would offer the contents of their clothes baskets or they would offer themselves as slaves, in the hope of saving their lives. Captured villages were usually burnt.

(61) If a village could not hold out any longer it might ask for peace. If this suggestion was acceptable, the chief came out with a couple of men bringing a present of cotton cloth. They also brought a slave to be killed by the victors who thus "on this man cooled their rage against the enemy". Before this had been done, no peace talks could take place. (62) Before there was actual talk of a besieged village yielding, other friendly villages might try to act as peace-makers, but nothing could be done until at least one side had had men killed as "war sacrifices". It was delicate work for the go-betweens who were liable to be accused of taking sides. Usually either they or one of the contending parties had to provide a man to be killed. (63) If the parleys were successful, both parties met for a feast at which a buffalo would be sacrificed and eaten, and a peace pact concluded.

(64) Losses in war: These were not great, and never such as to exterminate a community, but they were greatly exaggerated. Heavy loss is indeed not to be expected where war has the character of a trial by ordeal. The most serious losses took place where villages were entered, and reliable statistics for what were considered big battles exist for the period 1892-1902. Examples are 28 inhabitants killed and 1 child taken prisoner; 19 killed and 5 prisoners; 40 killed and 7 prisoners. (65) Great efforts were made to save a killed

comrade from losing his head by dragging the corpse away and burying it. The loss of a chief by the attacking force usually led to the undertaking being abandoned.

(66) If an attacking troop had no success, a search was made for anyone who could have done something to cause the failure. Punishment was meted out accordingly. If the fault did not lie with the warriors it must be due to the behaviour of the people at home.

(67) The object of Toraja warfare was not just to kill but to obtain heads. As soon as a man had beheaded his victim he quickly ran back with the head or threw it to one of the boys who fought in the rear and would carry it to the advance camp. We need not concern ourselves with the omens immediately sought from the head or with its preparation and drying.

(68, 69) Only a skull or two were needed, to take back and hang in the temple. The rest were thrown away, only their scalps being kept. Skull scrapings were also used, mixed with food, to communicate bravery to men, boys, and dogs. Since with the skull scrapings went some of the life spirit of the dead man's relatives, the latter also tended to weaken and die in the long run, it was believed. Scalps were similarly regarded, a small bit being given to everyone in the village. Pieces were also fed to the talisman and to everyone's amulet.

(70) Prisoners: Almost only young women and children were taken prisoner. However, it was difficult to spare anyone while the fight was on. To assure the safety of a prisoner the captor must get the person away as quickly as possible or a comrade might kill his prize. If the captor could not protect his prisoner himself, he would give him or her to the leader or some other powerful man. The leader might ask for anyone's prisoner, but could be placated with a buffalo or gong instead. If a group of men had together taken more than one prisoner, they gave one to the leader as a token of what they owed to his successful leadership. (71) A

captive was accepted in the new community after some ritual had been performed to prevent the relatives' souls from pursuing, and to get the prisoner to settle down. Captives felt no desire to return to their relatives, though they could visit them in times of peace. They could be ransomed for a high price: four buffaloes. They rarely attempted to escape, but often rose to positions of influence in the new community. They fought in wars even against their own village. Indeed, they were often the fiercest of fighters for they felt a grudge against their own people for letting them be captured.

(72) The return from war: Needless to say, if the attack had been a failure and the invaders repulsed with loss, they generally fled homeward in disorder, not neglecting, however, to lay down caltrops to delay any pursuers. (73) Even if successful the returning warriors had to fear the souls of the dead, including both those they had killed and their own dead comrades. Such souls appeared to them either as headless corpses or as flames, angered by the lot that had befallen them. To stop them the branch of a certain tree, together with certain offerings, had to be placed across the path.

(74) A victorious troop arranged to reach one morning a point near enough home for the sounds in the village to be audible to them. There they rested while their leader ritually freed them from any evil that might have accompanied them from the enemy land. Then they made bamboo flutes and played them. As soon as this sound was heard in the village all was bustle. Arrayed in their best clothes the villagers came out to meet them, except for those who must remain at home to cook food for the hungry men. As the two parties met, eager eyes sought for loved ones, though little outward emotion was shown. An old woman went forward to the leader and foremost warriors with certain ritual gifts. The men were also sprinkled with rice. A white hen was sacrificed, the old woman dipping a

piece of turmeric into its blood and rubbing it on each man's forehead.

(77) Once back in the village the warriors sat down and gave the people some account of their adventures. But they could not sit for long, because usually mourning rites had to be carried out for those who had been lost. Then the warriors went to the temple, beat the drums, and made food offerings to the enemy skull which would eventually be placed in the temple. They also made offerings to the ancestor-gods who had brought them success in the campaign.

(78) Should the troop have failed, naturally there was none of this celebration. In that case there was no ceremonial reception some distance from the village, but the inhabitants just discovered the surviving warriors sitting forlorn outside the stockade. Then much more ritual cleansing was required before the men could re-enter the village. Afterwards they went to the temple to let the ancestor-gods know of their losses, and to chide them for failure to help. The drums were beaten only softly, and omens were sought that might point to the failure being retrieved.

(79) On the night of the victory celebrations, and on subsequent nights, the people gave expression to their joy in song and dance. The singing of the young men and maidens was antiphonal, with much good humoured badinage. (80) Success might also be celebrated with a certain traditional song and dance.

(81-86) The climax of the celebrations after a fruitful campaign was the head-hunting feast. The ancestor-gods required everyone to take part in head-hunting. But since this was not possible for women, children, and the sick, this feast gave everyone a chance to carry out his duty since the ritual included imitation head-hunting in which all could take part. (87) Men who had shown prowess in war were rewarded with various marks of distinction, particularly of the headdress.

THE DONGSONIAN EVIDENCE

In the fourth or third century B.C.¹ the Dong-So'n civilization spread down the river valleys and coastal regions of continental South-east Asia, and to a large extent throughout the islands. It was a bronze age culture, and it certainly brought with it many bronze weapons which were eagerly accepted by the hitherto stone-using peoples of South-east Asia. According to Heine-Geldern the prototype of the keris was introduced at this period,² and though it went into abeyance during the period of strong Indianization in Java, it reappeared with the resurgence. Another type of iron Malay dagger, the *tumbok lada*, may have been introduced in bronze prototype with the more famous keris. This *tumbok lada*, Sir Richard Winstedt has pointed out, differs only from certain bronze knives from An-yang of 1000 B.C. and others from Ordos, in that these have hilt and blade in one piece. Both the Malay dagger and the Scythian sword have the same heart-shaped guard.³ Certainly some of the bronze daggers found at Dong-So'n closely resemble Scytho-Siberian types.⁴ Axes and spears depicted in the hands of spirit warriors on the early bronze drums no doubt are of bronze.

In a spirit boat on the Ngoc-lu drum,⁵ a spirit warrior stands on the roof armed with a bow, while in a similar position on the Hoàng-Ha drum⁶ the warrior pushes aside what appears to be a protective screen of dried grass and feathers, attached to the roof, in order to see

¹ As early as the ninth or eighth century B.C. according to the latest views of R. Heine-Geldern, "Das Tocharerproblem und die Pontische Wanderung," *Saeculum*, vol. ii, 1951, p. 238.

² R. Heine-Geldern, "Ueber Kris-Griffe und ihre mythischen Grundlagen," *Ostasiatische Zeitschrift*, vol. xviii, pp. 260-263.

³ R. O. Winstedt, *The Malays: A Cultural History*, London, 1950, p. 165.

⁴ V. Goloubew, "L'Age du Bronze au Tonkin," *BEFEO*, vol. xxix, fig. 5.

⁵ V. Goloubew, "Le Tambour Métallique de Hoàng-Ha," *BEFEO*, vol. xl, pt. 2, fig. 15 B.

⁶ *Ibid.*, fig. 15 A.

to aim. In another case on the same drum, a warrior fits an arrow of immensely exaggerated size to his bow. Goloubew suggests¹ it may be a magic weapon, since these are spirit warriors. Do we perhaps see here, since bows are rare on the drums as compared with axe and spear, the passing of the bow from practical to ceremonial use? It was of course to return where there was Indianization, with the introduction of the superior Indian bow.

In the Pasemah statues of south Sumatra, which are considerably later in date and show Han influence, we see warriors mounted on elephants, with bronze drums indicated on their backs, and they are also shown wearing bronze helmets and armed with bronze daggers. Such innovations undoubtedly spread widely through South-east Asia, though they may never have reached the East and West Torajas who, unlike the South (Sa'dan) Torajas, judging by their art and house forms, were never so much affected by these and other foreign influences. The Dongsonian cultural pattern brought the use of bronze (which would before long yield to iron) and brought decorative motives and a technique of expression that were far superior to anything previously known in South-east Asia. But it did not bring much change to the deeper aspects of culture, religion, and what through head-hunting was closely connected with it, warfare. This was very likely because the Dongsonian culture had itself not much new to offer in these respects.

It is important to recognize that, apart from the introduction of bronze, the great change brought by the Dongsonians, in so far as it concerns us here, was the improved technique of artistic expression which resulted in placing on record some direct documentary evidence as to the character of war at that time. But this evidence in no way suggests that such warfare was a Dongsonian introduction. For example, because a

¹ *Ibid.*, p. 391.

Pasemah sculptor is able to portray a couple of warriors mounted on an elephant, this does not mean that the capturing and taming of elephants for warlike purposes of some sort may not have been previously understood by Malayo-Polynesian peoples, at least in Sumatra and continental South-east Asia where these animals were indigenous.

It is, however, the processions and dances of the swaggering warriors on the bronze drums, instruments probably sounded at the feast of the dead as at modern head-hunting feasts, that best indicate that both the aim and the method of South-east Asian warfare about the fourth century B.C. can have differed little from what has been described in this chapter. Do we not see clearly portrayed on the Dong-So'n drums the elaborate feather head-dresses of the warriors, which are generally the mark of the successful head-hunter throughout South-east Asia? Indeed, in some cases the warriors carry objects in their right hands which Heine-Geldern believes can hardly be anything but human heads.¹

¹ R. Heine-Geldern, "The Drum named Makalamau," *India Antiqua*, p. 175, n. 27.

CHAPTER II

CHINESE INFLUENCE

As I pointed out in a recent work,¹ "we may be brought to recognize that Chinese culture bearers, long before their deeds were placed on record in dynastic histories, were actively if unconsciously laying the foundations of a 'Greater China' in South-east Asia, until superseded by the more attractive pattern introduced by the Indians."

While Chinese bronzes of Han period have been found both in North Annam and in Sumatra, the finding of sepulchral pottery in Sumatra, as well as what appear to be Chinese chamber graves in that island and in Java, seems to indicate that Chinese colonists were settled there in Han times. Further, the evidence of modern art styles in Borneo and Flores suggests that Chinese influence made itself felt, at least in those islands, as early as the third century B.C. Perhaps a comparison of the Chinese with the primitive methods of warfare of South-east Asia may help us to understand why it was that Chinese culture, the introduction of which began so early, made no lasting appeal in this area and quickly faded with the approach of the Indian pattern.²

Fortunately we are well informed as to the character of Chinese warfare at that time. From a comparison with what we know of the Malayo-Polynesian and Dongsonian type we can judge fairly well what must have been the local reaction to contemporary Chinese advice on this branch of their civilization. And we may be sure that the local reaction was very different from what it

¹ H. G. Quaritch Wales, *The Making of Greater India*, London, 1951, pp. 79-80.

² In accordance with the principle that introduced traits that clash with previous thought are rejected outright, or soon dropped.

would have been had the Chinese culture-bearers appeared on the scene three or four hundred years earlier. Then Chinese feudal warfare would still have been the only kind that they knew. Its main characteristics were recognition of war as a trial by ordeal, prior propitiation of the ancestors and tutelary deities, polite invitations to an almost bloodless battle, and exchange of messages to arrange the date for the encounter, dependence on soothsayers and omens, courtesy and spirit of the tournament. In short it was a duel of moral values rather than a clash of arms, and victory was won by the virtue of the chief.¹ Such idealistic warfare would have been readily assimilable by the inhabitants of South-east Asia, for the religious basis of war was the same, and there is no doubt that the ceremonial character of combat, surviving now in little more than relic form among the Torajas, would then have been much more in evidence.

As it happened, from the sixth century B.C., Chinese warfare had undergone a radical change. This came as the result of wars of expansion against the Barbarians on the borders. "Against the tribes which live outside Chinese law, they conduct wars of conquest in which the old rules of battle are no longer valid. They undertake colonial wars, wars of civilization: they make real war, bitter and without quarter . . . From that time begins the reign of technicians, military engineers and professors of tactics. Then are devised innumerable stratagems of war, and ambuscades. The object of war is the destruction of the enemy. The battle is no longer an ennobling tournament. Success alone counts."² In brief, "war, ceasing to be thought of as a procedure destined to reveal and to carry out the judgment of Heaven, became an industry."³

¹ Marcel Granet, *Chinese Civilization*, London, 1930, pp. 261-280.

² Ibid., pp. 281 f.

³ Ibid., p. 32.

Sun Tzu's masterpiece on the art of war, written in the fifth century B.C., has been translated into English.¹ It received the attention of many commentators down to the Sung dynasty, and is said to have been one of seven works prescribed for military training as late as the period A.D. 1078-1085.² One of the most important of these commentators is Tu Mu (A.D. 803-852). From his wide reading of military history, he considered that all the triumphs and disasters of the thousand years following Sun Tzu's time corroborated in detail the maxims of Sun Tzu. And he summarized the gist of Sun Tzu's teaching as follows : " Practise benevolence and justice, but on the other hand make full use of artifice and measures of expediency." ³

As thus defined, Chinese warfare certainly includes the essence of all successful warfare from the severely practical point of view. Indeed, it was because ancient Chinese ideas on the subject had already gone so far in this respect that Lionel Giles could reasonably dedicate his translation to his brother, a British army officer, in the hope that he might derive some benefit from it. But while such a people as the Torajas might give the Chinese art of war its due from a practical standpoint, it would fail to impress them in regard to what was to them a more important and basic aspect.

No recognition of war as an ordeal, no dependence on supernatural approval and aid are to be found in the Chinese treatise. Information as to enemy intentions can *only* be obtained from spies for " this foreknowledge cannot be elicited from spirits " (xiii, 5). While useful intelligence can be obtained from observing the movements of startled birds and beasts, this is a very different matter from seeking omens from their behaviour. Indeed, Sun Tzu is explicit on this point : " Prohibit

¹ *Sun Tzu on the Art of War*, trans. by L. Giles, London, 1910.

² Giles, op. cit., p. lii n.

³ Giles, op. cit., pp. xxxvii-xxxviii.

the taking of omens, and do away with superstitious doubts. Then, until death itself comes, no calamity need be feared" (xi, 26).

The commentator Tu Mu quotes Huang Shih-kung as follows: " Spells and incantations should be strictly forbidden, and no officer allowed to inquire by divination into the fortunes of an army, for fear the soldiers' minds should be seriously perturbed." And Tu Mu adds: " The meaning is that if all doubts and scruples are discarded, your men will never falter in their resolution until they die." Though divination and magic did creep back into later Chinese warfare, they were strictly excluded by the precepts that would have been inculcated at the time Chinese civilization had its great opportunity of impressing South-east Asia. In the same way the teaching that courage was a prime virtue in a leader would hardly have made immediate appeal to such peoples as the Torajas who regarded him more essentially as an interpreter of the will of the gods.

Malayo-Polynesian warfare would not have recognized that " all warfare is based on deception " (i, 18), for that would have left no room for the open pitched battle and single combat, in which war as an ordeal is most clearly recognized. And, leaving aside such ceremonial fighting, the primitive warrior was probably practical enough to have nothing to learn from such injunctions as " attack the enemy when he is unprepared, appear when you are not expected " (i, 28); " the way is to avoid what is strong and to strike at what is weak " (vi, 30); " practice dissimulation and you will succeed " (vii, 15). They also understood the advantages (v. 20) of ambushing a foe. Bitter experience soon teaches such lessons. Moreover, though the Chinese had already made a scientific study of the different types of terrain, and the correct use of terrain in war, it might be difficult to apply such precepts (x) to a different environment, and one of which the local people had already a sound

knowledge. The value of rewarding the warriors and according kind treatment to captives was already appreciated too.

If Chinese tactics held little that the primitive warrior would recognize as an improvement on what he already knew, Chinese strategy would definitely clash with accepted standards. This would lead to their rejection even though it is here, as Giles remarks, that we find principles approved by all modern strategists. How could rapidity of movement (v) be considered an essential in war, where every inauspicious sign caused halt and reconsideration. "The rule is, not to besiege walled cities if it can possibly be avoided" (iii, 4) could not appeal where loot, prisoners, and slaughter of the population were main objectives, at least so long as the walls were not too strong. Indeed, it was not until almost our own day that the modern world took to heart the crowning teaching of Chinese strategists: "To fight and conquer in all your battles is not supreme excellence; supreme excellence consists in breaking the enemy's resistance without fighting" (iii, 2).

We should hardly expect such a basically incompatible system of war as that of the Chinese to find willing acceptance in South-east Asia. It would be another matter where there was conquest and extreme acculturation. This actually occurred on a permanent basis only in Tonkin. Here governor Si Kuang, between A.D. 1 and A.D. 25 forcefully introduced Chinese ways, including the establishment of a local militia armed *à la chinoise*. Later, after the suppression of a rebellion, Ma Yuan completely transformed the administration and social customs according to the Chinese model.¹

More instructive is the course of events in contiguous Champa. In the reign of Fan-Yi, who died in A.D. 336, there arrived in Champa, about the year 315, a Chinese

¹ H. Maspero, "Études d'histoire d'Annam," BEFEO, vol. xviii, pp. 12, 18-19, 27-28.

named Wen, then aged about sixteen. Among other branches of Chinese civilization, he taught the Cham king the Chinese art of fortification and the manufacture of arms. He was advanced to the position of commander-in-chief, and eventually succeeded to the throne as Fan Wen. His first use of the military forces he had built up was to establish his authority over the wild tribes of the country, but on endeavouring to expand northwards he was mortally wounded in battle with Chinese forces in 849.¹ The mention of the crossbow among Cham weapons in the following description of the Chams dating from not long after this event, is a further indication of the strength of Chinese influences at this period: "These foreigners are bellicose and cruel. Their weapons are the bow and arrow, swords, lances, and bamboo crossbows."²

The Chinese influence had not, however, been firmly implanted, and it soon faded before Indianization. When in A.D. 446 the Chinese were again at war with the Chams they found themselves faced by an Indianized Cham army, complete with elephants. Confronted by the same unfamiliar threat as was Alexander at the battle of the Hydaspes, the Chinese commander is said to have hit on the ruse of making effigies of lions with paper stretched over bamboo frames. These so frightened the elephants that they stampeded and threw the Chams into disorder, with consequent victory to the Chinese.³

Considerations of a basic nature which prevented the acceptance of the Chinese cultural pattern as a whole, did not militate against borrowing, or attempted borrowing, of individual adjuncts to warfare, of obvious utility, just as there were also other material loans, especially art techniques. These isolated traits mostly

¹ G. Maspero, *Le Royaume de Champa*, Paris, 1928, p. 55.

² Ma-touan-lin, *Meridionaux*, trans. of d'Hervey de Saint Denys, 1883, p. 424.

³ G. Maspero, op. cit., p. 72.

came in later, and we shall mention them in subsequent chapters. However there is one which may well have persisted from the time of these early Chinese contacts, and is of considerable interest from the point of view of culture change. This is the contagious magic that was practised on the basis of the Chinese supposition that the gall bladder, whether human or animal, is the seat of courage. Indeed, the Chinese employ the same word *tan* for gall as for courage. In order to gain strength and courage the king of Yue Keou-tsien, who had been defeated in the fifth century B.C. by the king of Wu, "placed gall on his seat; when he sat or when he lay, he kept his eyes on this gall; when he ate or drank, he also tasted gall".¹ It is the fact that the use of gall to obtain courage, especially for war elephants, became so widespread throughout Indochina, though it is especially in Champa that the custom was followed, that suggests its relatively early introduction. It may have seemed more efficacious, and certainly more readily obtainable, than their own concoctions of scalp clippings and skull scrapings, especially once head-hunting was no longer enjoined by religion. We shall refer to the usage again in later chapters.

¹ Chavannes, *Mémoires histor.*, iv, 424.

CHAPTER III

INDIANIZATION

The Indianization of South-east Asia was essentially a peaceful and cultural penetration, though one authority has taken the Tamil inscription of Takuapa, which refers to certain protective duties of "the men of the vanguard" to indicate that "quite possibly the political power of the Pallava king Nandivarman III (A.D. 826-850) extended to parts of the west coast of the Malay Peninsula at least for some years."¹

Nevertheless it is no less certain that the Indian gurus introduced to South-east Asian rulers, as part of the Indian cultural pattern, a taste for the expansionist policies that characterized Indian imperialism, a desire to emulate the heroic ideals of the Indian warrior caste, and a knowledge of Indian methods of waging war that would facilitate the adoption of aggressive measures.

We may indeed find evidence for this in the renewed efforts at aggressive expansion which seem to have followed, and to be directly connected with, each successive wave of Indian *cultural* influence in South-east Asia. The coming of the Gupta wave leads to the building up of the Fu-nan empire, the Pallava wave heralds its replacement by the new and vital empires of Cambodia and Śrivijaya. Again, during the last quarter of the eighth century, the Java of the Śailendras was definitely the aggressor state of South-east Asia, a fact which it seems difficult to dissociate from the circumstance that it was Java whose culture was most profoundly modified by the influence of the Pāla wave.

Indian warfare has been extensively studied. For the

¹ K. A. Nilakanta Sastri, "Takuapa and its Tamil Inscription," *JRASMB*, vol. xxii, 1949, p. 30.

Epic period (*circa* 400–300 B.C.), and indeed throughout the Hindu period, since all subsequent Hindu warfare remains deeply rooted in its tradition, the basic and still unsurpassed work is the excellent analysis of E. W. Hopkins.¹ Apart from books on Indian institutions which usually contain a chapter or two on the subject, there are two special studies entitled *The Art of War in Ancient India*, by G. T. Date (Oxford, 1929) and P. C. Chakravarti (Dacca, 1941) respectively. These survey the whole subject on the basis of the material derived from Epics, Kauṭilya's *Arthaśāstra*, Manu, as well as later Pauranic and Nīti literature. They are both generally reliable and useful works, the second one being the more comprehensive.

Since anyone who so desires may readily acquire fuller information on Indian warfare from these books, or from the original sources, many of which are readily accessible in English translation, I propose here only to give in outline some of the main characteristics of Indian ideas and methods. This outline must, however, cover the subject rather generally for merely to pick out points that correspond to, yet present an improvement on, primitive South-east Asian warfare, would be to give a biased view. But I think that the conclusion will emerge, without my having to call attention to every point of correspondence, that Indian warfare, unlike the Chinese variety, must have readily commended itself to native rulers in South-east Asia. That is to say they were not likely to have accepted it merely as part of the neutral material which comes in with every cultural pattern that is adopted on other grounds. It will only be in later chapters that we may have to refer to specific details as and when we find evidence that these have influenced local developments.

¹ E. W. Hopkins, "The Social and Military Position of the Ruling Caste in Ancient India," *Journal of the American Oriental Society*, vol. xiii, 1889.

Over and above the various incentives to war that are common to mankind as society develops from the primitive, we find in ancient India a dominating urge to war, derived from the Hindu belief that war was a proper function of king and warrior (*ksatriya*) caste, and a king's highest duty was to smite his foes. Practical counsel recommended, however, that a king should gain his ends by peaceful means if possible, and even suggested that a victor should not seek extermination of an enemy, but should be content with submission.

While war was not regarded as a trial by ordeal, for no Hindu lawgiver could have suggested that his king might be wrong, Indian warfare did not lack a religious basis. To the Hindu warrior war was a sacrifice (*yajña*), which led to heaven as surely as did the Vedic sacrifice, and the *dig-vijaya* (conquest of the regions) was a proper kingly ideal. This encouraged the glorification of war, but it also meant that war should be prosecuted in accordance with certain rules of conduct, provided at least that the keeping of such rules did not stand in the way of victory.

War magic, the use of amulets, and the charming of weapons, must have been practised from very early times, but the prescriptions of the *Atharva-veda* remained in use throughout. Prognostications and omens, most commonly derived from bird behaviour, are frequently mentioned in the Epics, where they follow the usual principle of fallacious association of ideas. From these beginnings there develops in course of time the fully fledged system, largely astrological, of Varāhamihira, in the sixth century A.D.

Very different from the Chinese was the attitude of the ancient Hindus to the usefulness of astrologers in war "That king," says Bhīṣma in the *Mahābhārata*¹ "who sets out under a proper constellation and an auspicious lunation, always succeeds in winning victory." Kauṭilya

¹ *Sāntiparva*, 100, 26.

recommends that "astrologers and other followers of the king should point out to the troops the impregnable nature of their array and assert that, owing to their association with the gods and their knowledge of the auguries, they were convinced that the king was sure to win the day".¹ King Harṣa started for war "on a day with care calculated and approved by a troop of astronomers numbering hundreds who fixed an hour of marching suitable for the subjugation of all the quarters". He also wound upon his forearm "an amulet to prosper his going".²

We can easily understand how this apparently definite and systematized method of making prognostications, based on a close association of the astrologers with the gods, as Kauṭilya is careful to mention, must have appealed to the local people in South-east Asia as a great improvement on their rather haphazard means of choosing lucky days. Moreover the Indian astrologer was a specialist with an impressive fund of learning, whereas an overworked functionary of the type of the Toraja leader had to concern himself too much with the business of generalship as well.

The Indian Brahmans had other duties which gave them a considerable place in Indian warfare. They had much to say in the war council that advised the king. They also carried out the rites that had to be observed before battle, since strength of weapons was not considered enough to ensure victory, the power of *tapas* (meditation) and of *mantras* (incantations) being essential.³

The importance of obtaining the blessing of the gods and their approval in the undertaking of a campaign was as fully recognized in ancient Hindu war as it was with the Torajas. How much more powerful too must these Hindu deities have appeared to the primitive

¹ *Arthaśāstra*, x, 3.

² *Harṣacarita*, trans. by Cowell and Thomas, pp. 197, 198.

³ *Śāntiparva*, 94, 14; *Arthaśāstra*, i, 9.

people than their own ancestor-gods to whom in course of time the *devas* would lend their attributes. Hopkins¹ believed that by the fire service which had to be performed before the Epic battle "we are to understand a formal rite, in which the gods are called upon to destroy the foes of the sacrificer". According to Kauṭilya² the king should, on the day before the battle "make oblations to fire, pronouncing the *mantras* of the *Atharva-veda*, and cause prayers to be offered". The *Agni Purāṇa*³ requires a king to undertake religious observances for a week before leaving on a campaign; and a ceremonial review of the forces, called *nirājana*, was usually undertaken, at least in the later Hindu period, before beginning warlike operations. Nuniz mentions "offerings" and "sacrifices to idols" at the Vijayanagar court before the king left for war.⁴ After a victory the king again worshipped the gods and honoured the Brahmins.⁵

The ancient Hindu monarch was supposed to conquer by "fair" or "righteous" means if possible, otherwise he might fall back on "unfair" or "treacherous" war. Probably both forms always co-existed, but if a king could perform his "sacrifice" in an open and ceremonial way, which was usually the case when he disposed of overwhelming strength, he would do so. Not to prejudice by theoretical Indian standards, tactics which are nowadays generally considered legitimate, I shall henceforth speak of idealistic and realistic warfare, and when I am referring to the more treacherous aspect of realistic war I shall specifically say so.

Idealistic war was elaborately arranged in advance, due notice of it being given by an ambassador, and the only object of strategy was to bring about a pitched battle. A great many rules were laid down for its

¹ Loc. cit., p. 193.

² *Arthaśāstra*, x, 3.

³ *Agni Purāṇa*, 286, 1-21.

⁴ Sewell, *Forgotten Empire*, p. 326.

⁵ Manu, vii, 201; *Arthaśāstra*, xiii, 5.

conduct, such as that every soldier must fight against his like, horseman against horseman, footman against footman, etc., but the rule was not kept and indeed never could have been in the confusion that characterized the Indian battle.¹ So also with the many laws of war which, if practised, would have made Indian warfare the most humane, not to say velvet-gloved, imaginable. But it is doubtful if such laws were ever much kept, certainly not in the Epic period, which gives plenty of evidence that they received little attention.

"One chief," says Hopkins,² "slays a foe that stands 'with face averted', another engaged with a third, another who surrenders. So it is quoted as a 'marvel' that Bhīma once refrained from slaying his foe fallen on the ground." Furthermore, "we notice that whenever a hero 'makes up his mind to fight in an Aryan way' he violates all 'laws' of magnanimity. The real meaning of fighting in an Aryan or noble way is to rush amid the foes and fight to the death, sparing no one . . . as a general rule, a knight is killed without mercy."³ Boasting was also declared to be un-Aryan, "but there is no warrior who boasts more than he who quotes the rule—though it would be difficult to say which of all the chiefs was the greatest braggart."⁴ We must conclude, therefore, that even in what was intended to be the most idealistic of battles, an individual warrior usually found it difficult to obey all the rules, especially if he found himself in a tight corner.

The study of weapons, which formed a great part of the *kṣatriya's* training, was known as *dhanurveda* (from the primary importance of the bow). But the proficiency "was gained by a magical gift or by physical exertion, not by mental application, except in so far as religious meditation be so considered".⁵ Similarly, "in the use

¹ Hopkins, loc. cit., p. 209.

² Ibid., p. 229.

³ Ibid., pp. 230, 232.

⁴ Ibid., p. 238.

⁵ Ibid., p. 309.

of armour, the 'skill' consisted in making it invulnerable."¹

Banner and parasol seem to have been as important items of a chief's equipment as were his arms. The "flashing, not to say flashy, magnificence of the Hindu warrior" would doubtless have made a favourable impression on any South-east Asian head-hunter for "not only were the arms and armour profusely decorated, but the heroes also wore in all accoutrements whatever was most brilliant and showy".² According to Manu,³ war booty went to the soldiers who captured it but they should present a choice portion to the king. The soldiers also received fixed pay.

The ancient Indian army was constituted according to the fourfold division or *caturanga*: chariots, infantry, elephants and cavalry. From the fourth century B.C. down to the twelfth century A.D., infantry always formed the bulk of the Indian army, though it was usually an inert mass. While footmen sometimes decided the outcome of a battle through sheer weight of numbers, they were often scarcely distinguishable from the camp followers, and were only relied on for the defence of strongholds. Some of the infantry were armed with bows, others with spears, but all carried short broadswords. While the *kṣatriya* caste supplied the leaders, and some of the rank and file, the mass of infantry were made up of other castes, and these were supplemented by mercenaries and forest tribes. According to the *Śukrānīti*, mere numerical strength was an important factor, as it tended to frighten the enemy, and this was perhaps one of the chief functions of the infantry.

The use of war chariots was given up in the seventh century A.D. Indeed before this time the chief reliance had been transferred to the elephant division. In Epic times, when chariots were still the vehicles of knights, "elephants were employed *en masse* as a moving wall

¹ Ibid., p. 310.

² Ibid., p. 317.

³ vii, 96, 97.

in attack at the outset of battle, as a standing wall in defence, and, thirdly, as individual foragers through the crowd of blood-seeking desperadoes that make the background of every battle scene.”¹ It was only with the disappearance of the chariot that we find *kṣatriyas* fighting from a great howdah (*vimana*) on an elephant’s back. According to the *Agni Purāṇa*,² as many as six warriors rode an elephant, but this was not always the case. In theory each elephant was supposed to be accompanied by a fixed number of horsemen, but in practice the various army divisions were disposed in accordance with the requirements of the particular battle-array used.

Cavalry, which hardly existed as an organized force in the Epic period, were gradually developed in usefulness. Kauṭilya³ mentions among other duties the holding of strategic positions, protecting the sides of the army, first attack, dispersion, falling against the rear of the enemy, and pursuit. However the cavalry never attained a pre-eminent place among Hindu armies, partly owing to lack of good horses, especially in the south, partly because they never really mastered the art of horse-archery, their weapons being the lance and the sword. Both horses and elephants were given auspicious names.

Food supplies were largely provided by the huge concourse of camp followers. These were a source of weakness to the ancient Indian army.

The bow, drawn to the ear, not merely to the breast, was the chief Indian weapon, followed in estimation by the sword and club (the latter more esteemed than the sword, at least in Epic times), the dagger, lance, javelin, or throwing spear, battle axe and discus. In choosing a sword such auspicious signs as the *liniga*, Garuda and sacred images were sought for in it, while in the making

¹ Hopkins, loc. cit., p. 265.

² *Arthaśāstra*, x, 4.

³ Ch. 242, 24 ff.

various kinds of iron were used together. Both the *Mahābhārata* and Kauṭilya speak of the use of chain and cuirass-like armour, as well as wadded cotton coats. Probably such armour continued in use throughout the Hindu period.

A decimal system of army organization is indicated both in the *Mahābhārata* and by Kauṭilya, with officers graded by their command of tens, hundreds, and thousands. The usual position of the commander-in-chief (*senāpati*) in Epic warfare was in the van.¹ In later times, according to the *Agni Purāṇa* (ch. 242), a commander (*nāyaka*) proceeds with the vanguard, the king stays with the centre, while the commander-in-chief (*senāpati*) is in the rear.

The ancient Indian army, accompanied by its baggage train of elephants, camels, and bullock carts, had centre, wings (usually allotted to allies), flanks, rearguard, and vanguard. Further, even when on the march if danger was apprehended, these parts were so arranged as to form one of a number of formal battle-arrays which bore such names as *makara*, *garuḍa*, *maṇḍala*, etc. Each array had a specific shape and was selected partly in accordance with the nature of the ground, partly depending on the composition of the forces available, and partly on the particular array chosen by the enemy. These formations seem to have primarily envisaged idealistic warfare, but their use was not confined to that kind. Though their selection in part depended on the nature of the ground, there seems to have been little thought of making the best practical use of whatever the ground happened to be, as with the Chinese. On the contrary, the Hindu treatises lay down strict rules for the choice of a suitable field of battle. When thus drawn up the troops were harangued by generals and Brahmans to arouse their fervour.

Hopkins² describes the Epic battle scene in the

¹ Hopkins, loc. cit., pp. 201, 220.

² Hopkins, loc. cit., p. 223.

following passage : " As soon as the armies meet we read that there was complete disorder. The mass is helpless and imbecile, left to itself ; the knight is reckless and foolhardy. Instead of remaining to attack the division allotted to him at the outset of the day, he rushes about wherever he pleases . . . meanwhile the regiments led by the knights into the field either stand stock-still and look on at the spectacle, or they fling themselves against each other, two unheeded masses, and cutting and chopping each other in a promiscuous manner, lend their weight against the foe. More than weight we can scarcely call it. No individual common man is important. While this by-play goes on, one knight is slain or flees. Then all his soldiers run away, since they fight not for a cause but for a leader."

The above is a picture of the Indian battle scene that antedates considerably the introduction of Indian warfare into South-east Asia. Moreover, whenever or wherever Indian warfare tended more to the realistic variety, which we shall speak of shortly, such a picture would tend less to apply. But a sound reason for quoting it is that as Chakravarti puts it¹ : " It is probable, that to the last a battle was often a ' combat of duels and push ' ; it is certain that there was always an element of single combat, in the sense that when the king, who usually commanded in person, fell or fled, his army also fled." Moreover, we are justified in dwelling on this Epic warfare here in view of the probability, as will be shown later, that through the continuing influence of Epic literature there was a certain archaism about much of Indianized South-east Asian warfare.

Dust, noise, and confusion were the characteristics of the Indian battle scene, and martial music seems to have been designed to encourage this commotion. How frequently in the *Mahābhārata* does the sentence recur " Then there arose a tumultuous uproar caused by the

¹ P. C. Chakravarti, op. cit., p. 119.

blare of trumpets, the thundering of drums, the blowing of conch shells, etc., besides shouts and cries". Elsewhere it is laid down that at the beginning of a battle "the very skies should be rent by the beating of drums, the blowing of conch-shells and *kāhalas*, and the blare of trumpets".

Kettle-drums, cymbals, and flutes were the chief musical instruments, while for signalling, since the dust usually obscured a knight's banner, horns and conch-shells were relied on. And before we leave the subject of the pitched battle, we quote one further graphic passage from Hopkins¹ in which the contribution made by the martial music to the battle chorus is well indicated :

"The whole battle, from dawn or sunrise to sunset, is filled with the rumble of car-wheels, the ringing of hoofs, the undistinguished cries of men, the neighing of horses, shrieks of elephants, clapping of hands, tinkling of bells, clatter of weapons, twanging of bow-strings, beating of drums, blowing of shells and horns, yells of agony, shrieks, shouts of warning, curses, bravos, the thud of falling bodies, and—clearest of all, widest-sounding—the battle-signals and war-cries that never stop till some great hero falls; then comes a moment's pause, but only for a moment, until in renewed shrieks of fear and joy and all the noise that was for a second hushed, the universal uproar again begins."

Realistic warfare will concern us less because it has little of cultural interest and tends to be the same all the world over, whenever, through being hard pressed, warriors come to the conclusion that it is expediency that counts. It differs from the Chinese theory, however, in the recognition, owing to the promptings of basic religious thought which demand the approval of the supernatural powers, that it is only justifiable under duress. In this Indian realistic warfare, spells and

¹ Hopkins, loc. cit., p. 322.

incantations, poisoned arrows and the poisoning of wells, intrigue and treachery all had their place, as well as the more generally countenanced stratagems of decoy, feigned retreat and ambush, striking an unprepared enemy, and the use of fire. And great importance was attached to the work of spies.

Indian war camps were quadrangular in shape and were miniature cities, though generally situated in wooded places. Like the cities, they were protected by strong walls, towers, and moats. In general, however, there was a preference for hill forts and strongholds. Despite a knowledge of mining, and the use of fire in the last resort, the defence usually had the better of Indian siegework. Countermining and some rather crude engines mounted on the walls were often sufficient to repel attackers. In fact, as in primitive and in later times in South-east Asia, strongholds usually fell only by treachery or after a long and wearisome siege.

We know almost nothing of Indian naval warfare, beyond the fact that it was practised. Some Indian rulers kept large navies, and the raids of Rajendra Cola on Srivijaya are famous events in South-east Asian history.

Such then in outline was the superior art of war offered to, and it would seem readily accepted by, the head-hunting braves of the more accessible tracts of South-east Asia in the early centuries of our era. Yet it is generally agreed that the Indian culture bearers came in no great numerical strength, at least to a great part of the region, probably in no larger numbers than the Chinese who had preceded them and who continued in commercial contact, but whose cultural pattern had made no lasting appeal. This is a point that might well be pondered by those who would minimize the part played by the local people in choosing and moulding the introduced material.

CHAPTER IV

SRIVIJAYA AND JAVA

The growth and expansion of the Śrivijayan and Javanese empires entailed, as one might expect, the use of aggressive measures, as well as not infrequent conflict between the two great rivals, terminating in the absorption of Śrivijaya within the Majapahit dominions. Besides their warfare we may also consider here what is known of the military organization of the little Indianized states of the neck of the Malay Peninsula, which were at first independent, or within the orbit of the Fu-nan empire to the north.

It is indeed of these small peninsular states that we have the earliest information, and this suggests very thorough Indianization, as indeed we might expect since the population was largely made up of Indian colonists. According to the history of the Liang Dynasty (A.D. 502-556), with reference to Lang-ya-hsiu (Langkasuka, largely an east coast state), it is stated that "in this country they have made the city walls of piled up bricks; the wall has double gates and watch-towers. When the king goes out he rides on an elephant, he is surrounded with flags of feathers, banners and drums, and is covered by a white canopy. His military establishment is very complete".¹ Somewhat later, the New History of the T'ang Dynasty (618-906) says of the neighbouring state of Kora (also known as Kolo): "The soldiers use bows, arrows, swords, lances, and armour of leather; their banners are adorned with peacock feathers, and they fight mounted on elephants; one division of the army consists of a hundred of these,

¹ W. P. Groeneveldt, "Notes on the Malay Archipelago and Malacca," in *Miscellaneous Papers relating to Indo-China*, Second Series, vol. i, p. 185.

and each elephant is surrounded by a hundred men. On the elephant's back is a cage containing four men, armed with bows, arrows, and lances.”¹

The earliest reference to war in Śrivijaya is in the Palembang inscription of Kedukan Bukit, dated A.D. 688, in which it is stated that the king went in search of magical power (*siddhayātrā*) before leaving on a military expedition to Malayu, with 20,000 men, part going by boat, part by land. A slightly later (A.D. 686) inscription, found on the island of Bangka, which curses the enemy, was engraved at the time another Śrivijayan army was about to set out to subdue Java (probably West Java), a further stage in Śrivijaya’s attempts to expand.²

The interest in war magic evinced in the first inscription, in which Indian ideas have replaced local notions, is still alive in Sumatra among the Batak, an “internally marginal” people who preserve considerable traces of Indianization. However, it cannot be said, in many cases, at what period of Indian contact a given trait was introduced. The practice is to steal a child from an enemy village and entertain it for weeks or months on the best of food. A child aged three or four is considered the best as it is then old enough to understand what is said, but not old enough to be suspicious. Then, after propitiating its *tondi* (soul) the *datu* says, “I am going to send you to destroy my enemy. Wherever I send you, there you must go.” On a favourable day the child is led blindfolded out of the village and buried up to its neck in a ditch. The *datu* asks it, “Will you allow yourself to be sent by me?” If it answers unsuspectingly “Yes”, the *datu* gives it some more dainties to eat, and then says, “Open your mouth so that I may give you something more.” The child’s usual drinking horn

¹ Ibid., p. 241.

² These inscriptions have been translated by G. Coedès, BEFEO, xxx, pp. 29–80.

is then placed in its mouth, and boiling lead is quickly poured in so that it dies a quick though painful death. "The vow, however, which the child has taken with his last words binds his *tondi* after death. The operation has succeeded, and the village has obtained in the ghost world a willing and obedient ally for the fight against the enemy." A magical substance called *pupuk* is prepared from the child's juices, which is potent because the child's *tondi* remains with it, and this is placed in a hole in the *datu's* magic staff.¹

Since a similar substance named *momiai* is, according to Crooke,² prepared from the juices of a small boy in northern India, where it is used to make the owner invulnerable, and since we are going to speak of similar practices among the Siamese, whereas nothing comparable has been reported of the peoples of Borneo and Celebes, I feel justified in believing that this particular form of supernatural aid in war was introduced to South-east Asia from India.

The Sailendra Empire, which was known to the Chinese as San-fo-tse from the tenth century A.D., evidently impressed Chau Ju-kua as the leading military and naval power of South-east Asia. After saying that the king is guarded by men bearing golden lances, he goes on to say, "They are skilled at fighting on land or water. When they are about to make war on another state they assemble and send forth such force as the occasion demands. Then they appoint chiefs and leaders, and all provide their own military equipment and the necessary provisions. In facing the enemy and braving death they have not their equal among other nations."³

Unfortunately we know nothing of their naval warfare beyond the fact that they had a strong fleet and con-

¹ E. M. Loeb, *Sumatra*, Vienna, 1935, pp. 87-88.

² W. Crooke, *Religion and Folklore of Northern India*, Oxford, 1926, p. 112.

³ Chau Ju-kua, trans. by F. Hirth and W. W. Rockhill, p. 60.

trolled the Straits. However, in an encounter between some ships of Pasai with a Bugis fleet under a leader named Samaloco, which seems to have taken place late in the fifteenth century, we may have a survival of the sort of tactics employed by Srivijaya in earlier centuries. These were of the "ancient" type, as they were called by Western classical writers, a fact to which I shall refer in more detail in the next chapter, since warfare of this type seems to have been usual with the Khmer and Cham navies. Here I will only say that this type of tactics relied on boarding not ramming. In the case of this encounter of the ships of Pasai with the Bugis fleet (in which both sides used cannon, but the Bugis largely depended on poisoned blow darts), the prahu of Samaloco came up to that of the Pasai leader, and Samaloco threw his grappling irons. This pleased the Pasai commander for he said, "if we close now, perhaps we shall be able to leap on board, and run amok, with my curve-handled sword." However, in the face of this resolution, Samaloco changed his mind and cut the ropes of his grappling irons so that the prahus separated.¹

There is good reason to believe that the weapons used by the Śrivijayans were mainly Indian in style. That is certainly suggested by the miniature gold bow, arrows, curved flat sword, broad short dagger, and long shield that I found buried as foundation deposits in a sanctuary in Kedah of probably ninth or tenth century A.D.² Most of these weapons are closely paralleled in style by those depicted on the Ajanta cave paintings. Of special interest are the arrows with their crescent heads. They remind one of the type referred to as crescent-headed in the *Mahābhārata*, the favourite arrow of Bhima, with which one could cut a head from a body or divide a bow in two.³

¹ *Malay Annals*, trans. J. Leyden, p. 201.

² *JRASMB*, vol. xviii, pt. 1, p. 36, pl. 60.

³ Hopkins, loc. cit., p. 278.

Turning now to Java, we find ample evidence in the bas-reliefs of Barabudur that any warfare practised by the Sailendras of Java (late eighth century A.D.) must have been strongly imbued with Indian principles. True, what we see sculptured on these reliefs are not Javanese occurrences. We cannot always even be certain whether earthly or divine conflicts are represented in these Buddhist stories. But at a time when Indian influences were at their height, we cannot doubt that the military art of the Sailendras, like the rest of the Central Javanese cultural pattern, then adhered closely to contemporary Indian modes.

The Barabudur reliefs show four scenes of actual fighting.¹ They are melées, telling us nothing of tactics, but it is noteworthy that only infantry are shown as taking part. This was probably a characteristic of Javanese warfare, horses and elephants being mainly reserved for chiefs and high officers. However, there is no reason why these could not have been delineated should the exigencies of the story have demanded it. The same applies also to chariots, which are shown in Balinese *Mahābhārata* MS. illustrations. Finely sculptured elephants and horses do, however, appear on the reliefs in peaceful capacities, while the slightly later *Rāmāyaṇa* reliefs of Lara-Jongrang show a horseman and an elephant assisting at the awakening of Kumbhakarṇa.²

The Barabudur battle scenes, as well as many of its other reliefs, give us a good idea of the weapons used. An interesting point is the virtual absence of spears, interesting because only strong Indianization could have replaced this favourite local weapon by the bow. This, however, shares the chief place with the sword. The latter is of two kinds, flat and curved, of the type of

¹ N. J. Krom, *Barabudur*, vol. ii, pp. 208–210.

² Wm. Stutterheim, *Rāma-legenden und Rāma-reliefs*, Munchen, 1925, pl. 76.

which I found a miniature in Malaya or, less frequently, narrow and straight. There are daggers, but no trace of the keris. On the other hand a local touch is given to the battle scene shown in Ia 94, by an unmistakable blow-pipe being discharged by a warrior. Occasional clubs are represented. The bow is the Indian long bow, the arrows either being tied together in bundles or in quivers. The shields are mostly oval or square, both of which kinds survive in modern Java for ceremonial use. Occasionally the rectangular shield with curved sides, similar to the miniature found in Kedah, is shown. A cuirass is to be seen in Ib. 69. One relief depicts a war dance by four men, one of them having a square shield.

The Lara-Jongrang reliefs (which add little else to our knowledge of Central Javanese ideas on war) show a woman dancing with sword and shield. Such dancing is typically Tantric and is still practised in Tibet.¹ No doubt dancing of this sort would have found a ready appeal among Javanese women.

It may be added that parasols and insignia, such as accompanied the leaders in ancient India, are represented on the Barabudur and later Javanese reliefs in profusion. The magical significance of the war emblems probably increased in Majapahit times.² But while fighting retained its individualist character standards and war cries were a practical necessity so that warriors might be rallied to their leaders.

In Javanese epigraphy it is really only the A.D. 1041 inscription of the great king Airlangga that tells us anything at all.³ The Sanskrit version informs us (verse 4) that the king "through grasping the bow has got a deep stain on his hand" and (verse 8) that he "was ever ready to smash the foreheads of the elephants of his enemies as if they were merely earthen pitchers". He

¹ Stutterheim, op. cit., pl. 19 and p. 153.

² Ibid., pl. 200 and p. 195.

³ Trans. by B. R. Chatterji, *India and Java*, Calcutta, 1933, pp. 71-4.

"burnt the utterly uncivilized southern region" but "after having obtained much booty and distributed it among his servants, he only took away the glory for himself" (verse 27). In verse 29 the statecraft of Viṣṇugupta (Kautilya) is mentioned as being effective. Finally, in verse 31, it is said of Airlangga that he "has conquered all the directions, East and others".

Airlangga's exploits were justly celebrated, so we need not dismiss these statements as the flattery of a court poet. But it is in the Old Javanese version, inscribed on the other side of the stone, that we find a more human touch. There we are told, amongst some other additional information, that in A.D. 1027 "the king was still a boy, actually only 16 years old, not yet very practised in warlike exploits, on account of his youth not yet strong enough to manage complete armour".¹

In the thirteenth century Chau Ju-kua says of Shō-p'o (Java) that "the commanders of the troops receive an annual salary of twenty taels of gold, and the soldiers of the army, 30,000 in number, also receive fixed annual pay in gold in various amounts".² But Javanese sources for that century tell us little. The reliefs of the Jago temple show merely a man riding an elephant and a warrior armed with round shield and spear. The inscription of 1294, and the contemporary Chinese chronicles, tell us, in the manner of annals, much about the *results* of the fighting that took place in repelling the Mongol invaders and in establishing the Majapahit dynasty, but almost nothing as to the nature of the warfare. Perhaps the only exception is the Chinese mention that the Javanese had a fleet of ships with devil-heads on the stem. Probably they were prahus of the same type that had carried out, as we know from Cham inscriptions, the notorious raids of destruction on Cham coastal temples, in the last quarter of the

¹ Trans. by H. Kern, *Verspreide Geschriften*, viii, p. 107.

² Trans. Hirth and Rockhill, p. 76.

eighth century, and would now be used to escort the forces of Majapahit in extending the empire of Java beyond the seas.

Perhaps the chief interest in later Javanese warfare, from the point of view of culture change, is to know whether Majapahit times, which were marked by a deep-seated resurgence of the pre-Hindu culture generally, show a similar change in the art of war. The *Rāmāyaṇa* reliefs of Panataran concern episodes that are really too simian to be of much use as evidence on contemporary human warfare, even if we were prepared to consider, at this late period, material referring to Indian Epics as in any way safe evidence for contemporary usages. Experience tends to show that it is only safe then to rely on details, such as in dress and weapons ; and here we may note that the dress is completely changed from the Indian to the East Javanese fashion. Weapons, notably axes, clubs, swords, and daggers, seem to be Indian, though the curved swords are of a later type than those on the Central Javanese reliefs. Both swords and daggers have definitely Indian type hilts, and I can see no suggestion of the keris in them. Evidently the keris has as yet by no means fully re-established itself as an appropriate weapon for heroes. It may not have returned to recognized use before the fifteenth century when keris majapahit (though lacking the hilts) appear to be represented on a relief of a forge at Chandi Suku. And it must have been before the advent of Islam that the primitive magical figure forming the hilt was replaced by the supposedly more powerful Garuḍa or *rākṣasa*.

At Panataran the more frequent appearance of the spear, while the bow is confined to the human heroes, suggests an increasing pressure to resume the more local types of weapon. The forging of the weapons was, however, probably carried out in accordance with precepts introduced from India in earlier times. A copper plate

Old Javanese inscription of A.D. 1323¹ speaks of "magically forged weapons". The representation of Gaṇeśa's forge on the Suku bas-relief suggested to Schnitger² the probability that there was a colony of smiths at Suku, priests of the Divine Smith who at the bottom of the crater forged the weapons of the gods. The smith, always considered by the Javanese as a magician, often stamped an elephant's head on the keris.

The making of special weapons probably required in Java, as we have seen was the case in ancient India, the use of several kinds of iron obtained from different places. Such a tradition survived in connection with the making of the Malay keris. The author who tells us this also states that old Malays still know something of the art of procuring invulnerability by talismans, incantations, or drugs, a knowledge of which was in olden times part of the education of every hero.³

Apart from what has been said above, the monkey episodes of the Panataran bas-reliefs can be expected to help us little. A naturalistic horse with an unarmed rider, and an unridden elephant, are shown on one relief.⁴ We can therefore say that these reliefs, so far as they go, indicate that Indian weapons had by no means been given up, while the horse and elephant were familiar animals. Troops with horses and elephants are indeed mentioned as accompanying the royal tour described in the *Nāgarakṛtāgama* (Canto 18 and 59), which was written in A.D. 1365.

Now may be introduced a surprising piece of evidence bearing on the character of Majapahit warfare. In his *History of Java*, Raffles reproduces from a Javanese

¹ Trans. by H. B. Sarkar, *JGIS*, vol. ii, p. 152.

² F. M. Schnitger, "Les Terrasses Mégalithiques de Java," *RAA*, vol. xiii, p. 109 and Fig. F.

³ G. B. Gardner, *Keris and other Malay Weapons*, Singapore, 1936, pp. 14, 181.

⁴ Brandes, *Tjandi Djago*, No. 254.

MS. a drawing of a battle array. This, he says,¹ is claimed to have been used by the insurgents in the Matarem war of *circa* A.D. 1520, which led to the establishment of the Islamic dynasty. In that case it would previously have been used in Majapahit times. Raffles calls it the *bahui-mangkara*, i.e. *makara vyūha*, or *makara* array. In the drawing (see my Fig. 1) it is shown as a crayfish, quite understandably in view of the fact that in Java the Indian *makara* was interpreted as a crayfish.

When we examine the distribution of the forces making up this array, in which *Javanese* officers by name and their troops are set out in order, we can hardly doubt that the ancient array was at least intended for practical use in Java. A noteworthy point is the position of the *senāpati*, or commander-in-chief, in the van. This is the position of the *senāpati*, not in later Hindu warfare, but in Epic times!

In the same manuscript there was much astrological material from which Raffles quotes² the following pertinent passage:—

"The year appears to be divided into four portions, each distinguished by the peculiar position of a *nāga* or serpent. The first of the three divisions includes Jista, Sāda, Kāsar; the form and shape of the great *nāga* in these seasons is first stated, and represented by a drawing, the head being during these months towards the east and tail to the west . . . 'It will not be profitable to go to war in these months' . . . The second is as follows: 'In the season of Kāru, Katiga, and Kaphat, the head of the *nāga* is to the north and tail to the west . . . Success will attend wars undertaken in these months . . . In the third *nāga*, which includes the fifth, sixth, and seventh seasons, the head of the *nāga* is to

¹ T. S. Raffles, *The History of Java*, 2nd ed., London, 1830, vol. i, p. 381.

² *Ibid.*, vol. i, p. 585.

the west, his tail to the east, his belly to the north . . . In going to war in these seasons, be careful not to face the head of the nāga.' ”

I will leave discussion of the probable meaning of this astrological advice until a later chapter, when we shall have more material bearing on the subject. All that it is important to note here is that it affords sufficient evidence of a knowledge of Hindu war astrology persisting in the Majapahit period and even later.

If we still quite properly entertain a certain incredulity that the Javanese of Majapahit times, and even much later, could have practised Epic style warfare, it may well be dispelled by the following words of no less an authority than Raffles. He was speaking of Javanese warfare as conducted some sixty years before he wrote, i.e. before the people had lost their military spirit as a result of the restrictions imposed by the Dutch. “In their tactics and conduct,” he says, “they endeavour to emulate the examples given in their ancient romances ; and in the plans for their pitched battles, the march of their armies, and the individual heroism of their chiefs, they strive to imitate the romantic exhibitions contained in the poems of antiquity.”¹ And in a footnote, which reminds us strongly of what was conceived to be the correct thing in the idealistic warfare of ancient India, he adds, “In joining the battle it is usual for the warriors to shout, and for the trumpets, gongs, and drums used in the martial music of the country to be sounded.”

In his plates, besides the favourite keris, Raffles also illustrates a number of old weapons, some of which were still in use when he wrote, while others such as the bow survived only for ceremonial use, others again only in dramatic entertainments. Among the latter may be mentioned the *paspāti*, or crescent-headed arrow to which I have previously referred. Finally, together

¹ Ibid., vol. i, p. 381.

with these old weapons of Hindu origin, we find the native blowpipe which Raffles states had not been in use in Java for centuries.

One may also believe that the amok of the Javanese and Malays is a relic of the long cultural training for the pitched battle. "The phrenzy generally known by the name muck or amok," says Raffles,¹ "is only another form of that fit of desperation which bears the same name among the military, and under the influence of which they rush upon the enemy, or attack a battery, in the manner of a forlorn hope. The accounts of the wars of the Javanese, as well as of the Malayus, abound with instances of warriors running amok; of combatants, giving up all idea of preserving their own lives, rushing on the enemy, committing indiscriminate slaughter, and never surrendering themselves alive."

The testimony of Friederich as regards the Balinese is quite in line with the above. Here also the commander-in-chief is known as *senāpati*, the *padanda* consecrates the new weapons by placing mystic signs upon them and reading the Vedas over them to ensure their effectiveness, while the Epic writings are a pattern for princes. "In every undertaking and in every event, persons of rank are bound to conduct themselves in accordance with the precepts contained in those works. Contempt or indifference in following those sacred writings would bring disaster on princes and people alike, and the entire happiness of the country is indissolubly dependent on the imitation of those holy works."²

In view of this evidence two conclusions seem to be justified. In the first place there can be no grounds for supposing that, with a general resurgence of pre-Hindu culture in matters of religion, art, etc., there was a return to primitive warfare. Identification of the Epic

¹ Ibid., vol. i, p. 332.

² R. Friederich, "An Account of the Island of Bali" in *Miscellaneous Papers relating to Indo-china*, Second Series, vol. ii, p. 84.

heroes with their own ancestors (with a corollary objective in war to ruin the enemy's *chandis* as the source of their magic power) would only serve to encourage an adherence to Epic ideals, though not of course to the exclusion of realistic warfare wherever this became a necessity. Such a conclusion indeed accords with common sense for how, one may ask, could the Javanese have competed with the still very Indianized Srivijayans, much less have absorbed them into their empire, if they had returned to primitive methods of fighting. And it perfectly agrees with that characteristic of a resurgence whereby a people still continue to make use of those features of the waning culture that still suit their needs. The most that one might reasonably expect is that they would have found it easier, as they seem to have done, to return to the luxury of a prized pre-Hindu weapon, the keris, at least for personal use. Consequently there can be no division of the warfare of Indianized South-east Asia into western and eastern zones as I found to be both possible and natural in those cultural manifestations where a freer expression of local opinion was practicable.

In the second place, when turning as we shall now do, to the evidence of Javanese literature, we must rid ourselves at the outset of any preconceived idea that, in a literary work purporting to deal with historical events in Java, an epic literary style and the obvious influence of the *Mahābhārata*, automatically destroy the value of the account as a historical document. We have to remember that the Epics actually were among the most important media of Indianization in Java and Bali, their influence extending long after the Majapahit period in both islands. *Not only local literature, but also the local events and usages which literature sometimes describes, underwent the influence and bore the stamp of the Hindu Epics.* It may well be that under this continuing traditional influence, and secure from foreign

interference, Majapahit warfare not only remained Hindu, but to a contemporary Indian might have appeared strangely archaic. This archaism persisted, according to the evidence of Raffles, even into the eighteenth century. Hence a Javanese author of the sixteenth or seventeenth century, and undoubtedly influenced by the customs of his own times, will probably not be so far wrong when he tries to describe Majapahit events.

By the end of this chapter, and also in subsequent chapters, I shall endeavour to show that certain criteria can be used to establish, to some considerable extent, the degree to which literary accounts of battles can be relied upon as sources of factual evidence. To discuss the matter further now, before the reader has had the opportunity to examine any such literary material, would however be futile.

At present only a fraction of Javanese literature has been made available for study through translation into Dutch. Of this fraction only the *Kidung Sunda* provides material that is of interest to us, and it may serve as an example of what can be expected from such literary sources.¹ As it will not be accessible to most readers, I shall here translate into English most of the Second Canto, as a basis for discussion.

The *Kidung Sunda* deals with events which occurred in A.D. 1357, early in the reign of Rājasanagara (Hayam Wuruk) the great king of Majapahit, under whom the empire reached the summit of its power. The king of Sunda or Pajajaran (West Java) came with his daughter, accompanied by a large following of nobles and troops, in accordance with what he believed had been arranged by an embassy that had visited him in Sunda. The supposed arrangement was that his daughter should be wed as an equal to the young king of Majapahit. Having arrived at the port of Majapahit by sea, the Sundanese

¹ I am reliably informed that known Javanese manuscripts do not include anything in the nature of a treatise on the art of war.

proceeded thence by land, and encamped in great state at Bubat, to the north of the capital. While they were waiting there it was brought home to the Sundanese king and his suite that the scheming and ambitious Javanese prime minister, Gajah Mada, regarded the proposed match in a very different light. The princess was merely to be offered as tribute, as token of Sunda's submission to the Javanese empire. This was a development on which Gajah Mada set the utmost store, since it was the one thing needed to round out the Majapahit dominions. But the king of Sunda refused these terms.

These circumstances very naturally, from Gajah Mada's point of view, set the scene for a display of idealistic warfare such as would enhance the fame of Majapahit. It is very remarkable that the Sundanese king, though his forces were so much weaker, should have responded in truly knightly style. It may be said in justice to the Javanese author of the *Kidung Sunda*, that he is fully conscious of this, and he gives the king of Sunda all credit. This should not lead us to suppose, however, that the people of Java were any more strangers to realistic warfare than were the Indians, or any less ready to make use of it when it offered a chance of saving a situation. For example, a Balinese MS., of which the contents are known only (as is too often the case) from a catalogue summary, tells us of the forces of a king of Singhasari being enticed into an ambush and attacked on both flanks.¹

The *Kidung Sunda* is borne out, as regards the bare historical basis of the episode, by the *Pararaton*, a chronicle of very uneven character which utilizes many romantic episodes, of which the story of this conflict with Sunda is one. But the historical value of the *Kidung Sunda*, as Krom has said,² is that (even though probably

¹ "Djajalenghara Soenjawibawa" in *Indonesische Handschriften*, by Poerbatjaraka, Voorhoeve and Hooykaas, Bandung, 1950, p. 21.

² N. J. Krom, *Hindoe-Javaansche Geschiedenis*, 2nd ed., The Hague, 1931, p. 28.

dating from the sixteenth century) it is not dependent on the *Pararaton*, but is independently founded on the same traditions that are the basis of the *Pararaton*. And he accepts¹ the *Kidung Sunda's* reasons for the misunderstanding between Sunda and Java as much more probable than the very obscure ones given in the *Pararaton*. As to the actual fighting, the *Pararaton* fully agrees with the *Kidung Sunda* as to the outcome : "The battlefield was like a sea of blood, with a mountain of dead on it, all the Sundanese without exception being destroyed, in Śaka, 1279."² The one or two details it gives of the fighting will be referred to later.

In describing a battle the Javanese custom was to mention by name all the leading warriors killed. As an example may be mentioned the fighting following the death of Kṛtanagara, which led to the establishment of Vijaya at Majapahit, in which the names of the heroes killed are recorded in the *Pararaton*.³ The same usage is followed in the *Kidung Sunda*. So also a number of known geographical locations are mentioned by name. Both circumstances tend rather to increase the probability of the account's general veracity.

THE GREATER PART OF THE SECOND CANTO OF THE *KIDUNG SUNDA*⁴

[The first thirty-five stanzas tell of the King of Sunda's determination to fight and face death, as becomes a *kṣatriya*, rather than tolerate the Majapahit

¹ Ibid., p. 403.

² Trans. by Brandes, in *Verhand. Bat. Gen.*, 62, 1920, p. 158.

³ Loc. cit., p. 91.

⁴ From Dr. C. C. Berg's Dutch version in *Bijdragen tot de Taal-, Land- en Volkenkunde van Nederlandsch-Indië*, vol. 83, 1927. The translation into English from Berg is the present author's and is published by permission of the Koninklijk Instituut voor Taal-, Land- en Volkenkunde. Extracts only from those of Dr. Berg's footnotes that appear to be of interest for our special study are given in footnotes here. Remarks by the present author are in square brackets.

insult. His *mantris* and *tandas* (officers) pledge themselves to fight with him to the death, Viṣṇu's heaven being the recognized reward of those who die in battle. Though he asks his wife and daughter, the young princess, to return to Sunda, they insist on remaining, as becomes their high birth. It is then briefly stated that the Sundanese prepare to give battle, and the scene changes to the preparations that are also being made at the Javanese capital city of Majapahit.]

36. Now it is further told that at Majapahit an army was being assembled; the troops from Daha and from Kahuripan had already arrived; Majapahit was full of warriors.

37. Gajah Mada ordered the famous war gong Basantaka to be beaten; it boomed and thundered enough to be heard through all space. The *tandas* and *mantris* came up with their troops, vehicles, horses, and elephants.

38. The troops all came up in their armour, even from far and near. The routes of access to the city were crowded, as also was the *pasar* and the *wanguntur sela*; even the *bale* swarmed with *mantris*.

39. The *mantris* from Daha were on the *jaba larangan* [see note 1 on p. 78]; with their warlike mien, stalwart and brave, clothed in battle attire, they were like the heroes one sees in pictures. Tuhun Rajata was their general.

40. There were Lēmbu-Lalawan, ken Wirādhyakṣa, tumēnggung Wiragati, dēmang Meghāntaka, and the remaining *ranggas*, not forgetting the *mantris anom*; fully equipped were the troops, and the army was alert and astir.

41. The *mantris* from Kahuripan (Janggala) were in the Wirasabhā; their clothes were splendid, a mark of the king's favour; beautiful were they, like a whole forest of flowers, which glittered gaily as the sunlight irradiated them. Gagak-Kṣetra was their general.

42. Further were there the mantri-wṛddha ken Jiwa-rāga, pati Pañjang-Jiwa, tumēnggung Wirāndaka, dě-mang Pamasah, and further rangga Palana and apañji Śureng-Pati,

43. like *apsarases* with languorous appearance and yet warlike, exquisitely clad in yellow; further the *mantris anom* and the *ranggas*, truly sprung from noble stock, the flower of Kahuripan (Janggala), certainly of choice families;

44. and when we add to these the troops, the army was complete, with vehicles, horses, and elephants, with all kinds of percussion instruments and rows of standards. As to the *mantris* of Majapahit, they also got their army ready, beautiful as a volcano.

45. They had as head ken pati Gajah Mada, the world famous war hero of Majapahit; as standard he had a flag of cloth on which an elephant with raised trunk was painted (embroidered), executed in gold, luminous as a shooting star.

46. Further were there the mantri-wṛddha Lēmbu-Wṛddha, the patis Madhu and Gowī, Mēnto, Kēbo-Bung sang, Tētēg, Mēñjung, pati Marga-Lēwih and ārya Tadah, who had become grey-headed in battle,¹

47. followed by the other battle heroes of Majapahit families, the flower of select heroes the *jajaka-rājasa*.²

48. As far as that night is concerned nothing more is told of what happened in the army. Next morning when the sun rose, the drums beat loud enough to be heard in heaven. The tumult of the troops was so tremendous that it might have been the crack of doom.

49. Brilliantly the lances gleamed, rivalling the rays of the sun. When their highnesses [the king's father and uncle, the former being the prince consort] were ready, they came out like two suns rising over the Dawn Mountain,

¹ i.e. pre-eminently expert.

² Name of a corps?

50. with the young king whose appearance was charming, and lovely was his languorous figure; truly he turned many heads and his glances caused a lasting torment; his mind was fixed on love and love he desired.

51. In front marched the men of Majapahit, followed by *tandas* and *mantris*. Then came lord Mada, the army commander; he rode, as chief, on a car which carried a standard of cloth, provided with streamers.

52. Also there were little flags on the front of the car, which were ornamented with costly gold and had jewelled *pamapags*.¹ He had, as always, a black *payung* [parasol], painted with gold at the edge. Truly he was a Kṛṣṇa become *pati*.

53. Then followed the one who seemed like Kāma (Hayam Wuruk); he was in the little house on an elephant; was attired in white wool and wore a gold lotus collar chased with lotus flowers: the flowers had ruby centres and pretty foliage.

54. And lances with little flags were in front. He had a field ensign of white silk, on which a *makara* was embroidered [see note 2 on p. 78]. As always he had a white *payung* with a handsome gold head in the form of a crescent moon, which gleamed to the sky.

55. Behind him came the prince of Daha, followed by his officers; he sat in the little house on an elephant, adorned with costly gold, he had a yellow *payung* and field ensign of yellow silk.

56. A water-hen was painted on it in gold and its streamer was pretty; he carried an oblong shield (*dadap*) with a gold rim, had a white fly flap, while in the other hand he held a bow and flaming arrows, terrifying for the enemy to see.

57. His *mantris* all rode horses, with gold-worked saddles; they shone like *cāraṇas* (heavenly singers); shaded by their *payungs* they made a pleasant

¹ Points?

impression. They had lances and pennons. Also the troops which preceded them were well dressed.

58. Last came the prince of Kahuripan ; he looked enchanting with his moustache and his dainty, loosely made chignon, majestic, and with his crown of jewels and gold in *chandi*¹ form, surpassing the Buddha in lustre.

59. Handsome was he, riding on his big elephant from the land of Bogor [see note 3 on p. 74], world famous under the name of Supratika, and exceedingly glittering with ornaments ; he was covered with gold and costly gems.

60. *Payung* and banner were black ; this last was bordered with gold, had the form of a bull, and fluttered in the breeze. Also there were little flags on high, bordered with red and provided with gems and costly gold,

61. with pearls, which glowed like ravishing fireflies, to points (*pamapag*). His teeth flashed like Indra's *vajra* ; his sharp pike (*kakaracan*) and his bow were finely ornamented.

62. He was followed by his *mantris*, who were all on horseback and were shaded by their very pretty *payungs* ; they had brightly coloured banners with gilded streamers ; just like the leaves of a book, so closely packed were the ensigns and flags. Quickly they marched on, and before they knew it, they were all on the Wilajanggala field, and the Majapahit troops were in Pablantikan, in Ampel-Gading and in Masigit-Agung ; all had come out, in countless numbers, so that the camps were full.

64. Gajah Mada spoke respectfully to the king : "Your servant would now send a message to the Sundanese to warn them : perhaps they are afraid of death and are ready to bring the princess.

65. and, under the making of a *sembah* [obeisance],

¹ *Stūpa* ?

to accept the orders of the king, while they explain that they have come to offer their respectful homage in ceremonial manner."¹ The king nodded in token of agreement with the chief and sent for Tōtēg and Mēñjung; these came quickly and took the *pati's* instructions.

66. The two messengers had thus received their commission. A hundred men accompanied them. How it went with them en route is not related. At Bubat a feast was being celebrated day and night, an unrestricted drinking bout. Apparently they wanted to make the most of life while it lasted.

67. Freely and busily were they enjoying themselves to their hearts' content, as though conscious of no trouble. The gongs were sounding loudly; all Bubat was astir. The king of Sunda sat under a banyan tree. Then the messengers arrived.

68. Without asking permission they appeared before him and said emphatically, "Ho! king of Sunda, we have orders to come and see you, from the exalted king of Majapahit, who is on the way here and now is in Masigit,

69. as promised. If you have fear of death, come quickly and pay homage at His Majesty's feet, and offer him as living proof of your submission, the most fragrant part of the *sembah*, the princess."

70. Hardly had the king heard this when he stood up in his annoyance and said, "Envoy, tell your master that I have no more thought of appearing before him and leading our princess to him!"

71. Even though the Sundanese had but one arm left, yes, even were both right and left arms shattered, they still would not blink if they were overwhelmed on the battlefield." The *pati* also was angry: it was as though his ears were torn off when he heard the sharp words of the Majapahit envoys.

¹ Translation uncertain.

72. And tumēnggung pangulu Borang was so red that he was as though he had washed his face in blood ; his breast heaved, and while he stood up and, with his finger threateningly pointing down at them, he said in a severe voice : " You have said too much, apes of messengers that you are.

73. About turn ! Call up your comrades, every one of them. Conquer us to-morrow and give rein to your passions ! " The envoys immediately answered, " Now expect your ruin to-morrow."

74. Then they retired, continuing to brag that they would crush them next morning. But the Sundanese *mantris* restrained their anger. So the envoys left Bubat and returned to Masigit.

75. They prostrated themselves at the king's feet, made a *sembah*, and reported : " Your Majesty's servants have been to Bubat ; but it has so happened that Your Majesty's orders are not accepted, and that only embitterment has resulted.

76. Further they have given express orders to Your Majesty's servants to say to Your Majesty that you must come to Bubat and make a speedy attack on them, and that the king of Sunda longingly awaits the moment when he can give you a warm welcome there.

77. By this message was the ill-humour of the king further aroused ; thus spake he quietly, " Up all you *mantris* that are present here, get ready, crush them, don't be afraid. Let us now see what great bravery we have here ! "

78. However ken Gajah Mada, with the other *mantris*, made a *sembah* and said, " Let my exalted lord not advance before to-morrow morning, when the troops will be at full strength. Now it would be difficult, as it is already approaching evening."

79. His opinion as to the way the campaign must be fought he announced as follows : " The advancing troops must be split further into different sections : the

enemies of Your Majesty are like dogs, which anyone infuriated with them kills as he can catch them ; that's the best way to dispose of them ! ”

80. So rang out the words of pati Gajah Mada ; the *mantris* agreed and His Majesty nodded his approval. The sun had nearly set. The troops went to their quarters, distributed over a number of huts, and lay in a circle round their leaders.

81. Of the night nothing is told, but of the following morning. The sun had risen over the Dawn Mountain. The Majapahit army, shining in the sunlight, was like a flaming fire, which, when it progresses, overwhelms all.

82. From the east marched the young king with his officers ; nothing was lacking in his army : the cannon were arranged in rows ; the shields were as clouds, among which the swords gleamed like lightning, while the darts threatened to rain.

83. From the west the men of Kahuripan were on the move, as well as those of Daha. Both princes were in the midst of their troops : the *mantris* who rode in front, formed the escort ; the troops spread everywhere, as close as water in the sea.

84. Also from the south the troops came up, the great army of Majapahit and its *mantris* ; as their general functioned no one less than the lord Mada, who in warlike attire rode a chariot.

85. His *mantris*, as well ordered as one sees in pictures, warlike, stalwart, clothed in yellow, with jackets with gold ornamentation and excellent equipment, rode before him as escort ; they had yellow loincloths and patterned girdles.

86. Now the advance guard had come level with Bubat ; the cannon were brought up ; gongs resounded and war whoops echoed. Then the Sundanese did their best and raised a shout in their turn, which roared against the opposing din.

87. Also there were many Sundanese in boats, namely those who served the cannon and the boats' officers ; the shots flew about like hail : all stood ready to receive the advance guard of the enemy.

88. The Sundanese now acted in accordance with the laws and duties of war ; if wounded they grudged it on account of their heroic duty, that is the excellent way of acting. The advance guard closed with the enemy in the middle of the field . . . ¹

89. Now the Majapahit troops advanced in serried ranks from the south ; not afraid, they rolled forward like the waves of the sea bearing themselves like true soldiers : there they struck with lances and spears and made use of blowpipes and darts.

90. Loudly echoed the shouting and resounded the rattle of drums and the boom of gongs. At the same time muskets cracked and shots flew hither and thither. Many Sundanese were hit, but they remained undaunted ; in closed ranks they made an assault, as though they were conscious of no peril.

91. Many of the Majapahit troops were overcome, struck down, down trodden, or felled with the lance ; many others were crushed, by being trapped beneath those who advanced over them, or by coming in contact with the forward pressing enemy and being cut down ; many were flung down to left and right, their bodies smeared with blood.

92. The Majapahit army shrank back and turned tail, some in front and some behind being killed ; their advance guard was smashed and pursued, and soon cheering broke out over them. The *mantris* of Majapahit were furious, and ordered the troops to move forward, and soon they had resumed the fight.

93. Again they pushed forward ; it was a fierce battle, as in pictures ; neither side wanted to give ground. The fighting was heaviest with the troops who

¹ Not wholly clear.

still stood in the east, the cannon on the boats¹ were fired unceasingly, with a sound as of thunder in the sky.

94. Great destruction was done to the young king's troops because they were close by the river bank ; left and right were they shot down and died ; the bodies could scarcely be called bodies ; they were maimed, broken asunder in the most horrible manner, arms and heads were blown off ; nobody was left.

95. The men of Majapahit were dismayed, frightened, and bewildered by the shots which fell as thick as rain ; they fell into confusion and ran in every direction, ultimately seeking refuge in the woods ; they paid no attention to the fact that it was difficult to force a way through the thorns ; others found themselves in the dales, like hiding stone martens.

96. The Sundanese fought like men who didn't expect to escape with their lives ; the fighting was heavy ; they tried to get the better of each other and disregarded the dead ; they inflicted mutual losses ; over and over again the din of battle resounded ; the fire-shooting cannon were as frightening as lightning in the month of Caitra.

97. Heroes fought with heroes, thickly packed as the leaves of a book ; they did their work well and failed not ; unafraid, they deserved well of their lord. Now shall we speak of the western army : the battle was here afire and men tried to overcome each other.

98. Lively was the battle ; mingled together they fought. Loudly sounded the kettle drums, the drums and gongs rumbled as though they would collapse the firmament ; the troops made enough noise to smash the world in fragments ; horses neighed, elephants trumpeted.

[In view of their small literary value Dr. Berg gives only a summary of the next thirty stanzas, consisting

¹ The Majapahit eastern army marched against Bubat along a river bank.

mainly of a list of warriors killed in single combat, which we may omit.]

Then the narrative continues :—

129. Many leading nobles of Majapahit died as heroes in the battle, even men of the guard (*balakrama*). Pati Madhu and ken Tētēg were extremely exasperated ; they urged forward their horses and advanced with their troops.

130. Then all at once ken Jātiguru on his horse came up and went for pati Madhu. Jātiguru smiled and said, “ It’s certainly a lucky chance that I run up against you. Now, Madhu, you must remember how you in Sunda joined me in expressions of mutual friendship ! ”

131. You knew how to speak in a friendly way at the king’s feet, but out of that honey have you brought forth death. That is the way of the worthless ! What heroic usage do you follow, that you so treacherously go to work against us ? When you came to Sunda meditating war on us

132. then you seemingly wouldn’t touch a hair of our heads ; you wanted to be friends. Now if camaraderie was the intention in the beginning, you must also go with me further : forward, come closer, now shall we exchange wounds ! ”

133. Ken Madhu answered him straightway, red with anger : “ I have not behaved treacherously. I asked in a just manner, but you have not kept your promises, so that you have not conducted yourself like the other vassals in your visit to Java. That is the reason why things have turned out thus.”

134. Jātiguru was angry and hewed at him repeatedly. Pati Madhu didn’t give ground, and himself struck in his turn. Both used their *dadaps* to parry the blows. So clashed the *rantangs*¹ and the swords against each other that the sparks flew.

¹ Name of a weapon.

135. Both were dexterous at parrying ; for long they rivalled each other in bravery. Then the horses suddenly got into a crosswise position ; they spun round, kicked out at each other and snorted ; Jātiguru showed his weak side and was lost : he yet parried

136. but his shield received a blow from Madhu's sword and fell in pieces on the ground ; a second sword cut he still was able to parry, but before he could recover he was again struck with the sword, his breast was pierced, and blood spurted forth. Pañji-Mēlong rushed up to pati Madhu and threw a spear at him, but Madhu was not wounded ;

137. only he fell head foremost from his horse. Ken Tētēg dashed up and threw a spear with force at Pañji Mēlong ; the latter was fatally wounded by it and died, and in less than no time was his head cut off. A thundering cheer went up and loud sounded the percussion instruments.

138. Then confusion fell upon the Sundanese ; they tried to flee with their king, followed by a rain of darts ; many were killed. Pati Anepakēn, the highest dignitary of Sunda, was disturbed.

139. He rode a fine horse, adorned with tassels, and gleaming black in colour, as the feathers of a crow ; it was named Gagak-Mayūra and was as big as Andawēsi [a horse famous in Javanese story] ; it was a specimen of the noble old Biman race from Korek.

140. With him was Larang-Agung, who rode an elephant and was finely attired. They were in full panoply of war, with their black *payungs* and standards, as well as their ensigns, like none other than the giants Sunda and Upasunda [see note 4 on p. 74].

141. Anepakēn had a gold embossed shield, adorned with gems. Over his head he brandished his sword that flashed in dazzling manner. His pike¹ was sharp, even as his gold inlaid lance.²

¹ *kakaracan*.

² *buntal*.

142. His lance¹ had a pennon of red wool and a head of costly gold ; it was large and coloured, adorned with gold work and with a point of pearl. Proud was Anepakēn, truly the first among *mantris*.

143. His guards² were handsome, as in pictures ; they had lances of jring-wood, wore gold worked coats and breeches of fine make. They knew how to bear themselves as noble warriors of good families, the flower of Sunda's youth.

144. They brought their troops to the fore. The *pati* said " Up now comrades, direct your attack towards the south, against the main army. There you will find the *pati* of Majapahit

145. the one who has a cloth flag, the Gajah Mada with his dirty practices. Throw yourselves upon him, give him no chance to rest, follow him even to Majapahit, make your assault with closed ranks, and know no fear ".

146. Full of fighting spirit the troops moved forward ; [But, states Dr. Berg, in the following stanzas (146–157) there is no sign of any general attack ; only further single combats, which he summarizes. Then it is told how Anepakēn and Larang-Agung fell :]

158. Larang-Agung attacked like a bloodthirsty tiger who had come out to slay : all the animals of the jungle that he set upon fell overpowered, just as a dyke of sand, hit by a torrent, inevitably must succumb and be washed away.

159. The *pura mantri*s Kuda-Wirada and Wiraśastra tried to oppose him, but both were defeated. All who came in his way lost their lives. Larang-Agung, how long and furious was this hero's attack.

160. Anepakēn swung his sword above his head and hit out freely ; many of his opponents had to pay with

¹ *watang* ; this last it would appear from the description, was exclusively a show weapon.

² *jajaka*, a special corps, cf. Majapahit *bälakrama*.

their heads ; the others fled in every direction ; many *ksatriyas* were defeated. Pati Gajah Mada was angry, and stood opposite him in his car.

161. It wasn't long before the Sundanese *pati* in the course of his onslaught came face to face with the Majapahit *pati* : "That's a lucky chance that you came this way," he smiled. "Do you remember what we said earlier, when we were in the *paseban* in the monk's presence ?¹

162. You have been successful in your ambitions to destroy the Sundanese ; they will die as sacrifices for the land on Majapahit soil. Come, alight now and let us fight each other, man against man on level ground, competing in the spilling of blood."

163. Gajah Mada answered at once, red with anger : "I remember well what occurred earlier and I keep to what I said ; the reason that I have come here is that I expected to meet you in battle and see what your bravery is worth.

164. Come now a little nearer, so that I can cut off your head." The Sundanese *pati* was furious ; he urged on his horse and rode round Gajah Mada who still stood firm on his car.

165. He let his horse continue to circle round Gajah Mada, looking for a weak spot. Long did they thus compete in bravery. Gajah Mada was just like a grim lion ; standing on his car he made threatening gestures. Then the *pati* of Sunda sprang on the car,

166. with the intention of coming to grips with his opponent on it ; but scarcely had he found a footing on the shafts in order to clamber further on to the car, than ken Enti ran his lance deep into Anepakén's belly, so that blood streamed forth.

167. Anepakén held his wound close with his hand, and did not fall back, but tried to resume his fight with Gajah Mada in a man against man combat. He wanted

¹ Cf. similar speech in ii, 180.

to climb right onto the car, but received a lance blow from Gajah Mada so that he fell head foremost to the ground.

168. Again and again he tried to spring up, but he was finished ; blood spurted out. Larang-Agung was fighting with the *mantris* of Majapahit ; he stood firm even though pressed on all sides ; but he was overwhelmed and destroyed. So Larang-Agung, though he could have kept himself out of the fight, paid with his life.

[Summarizing only the next 32 stanzas, Dr. Berg says that the unfortunate course of events was communicated to the king of Sunda. He then decided to make an attack on the western army of Majapahit, which was under the command of the princes of Kahuripan and Daha. His last officers were killed in single combats.]

200. . . . As to His Majesty the king of Sunda, he remained, owing to the loss of *tandas* and *mantris*, without any guard ; his men were killed ; clearly there were few left.

201. Like a junk, which wants to cross the sea, but now has no rudder, while all sails and oarsmen are gone, so that there is no more hope and the end will be that she sinks in the open sea, so was the king's battle.

202. He knew that his hour had come. Then he urged on his elephant. Now came his lionlike courage and his excellent kingly nature to the fore ; his eyes blazed like fire ; fierce as a lion without fear he attacked his enemies.

203. A great number of knights from Kahuripan were defeated ; *ksatriyas* and chief *mantris* were killed by the tusks of his elephant ; they fell into commotion and turned in every direction. Both the princes were infuriated : they stood on their elephants, bow in hand.

204. It was not long before the elephants of the prince of Kahuripan and the king of Sunda furiously attacked each other ; trunks upraised they went for each other with their tusks. The king of Sunda shouted,

"What a lucky chance that I meet you as I had so desired.

205. My intention in entering friendship was, that I should come into *bésan*-relationship with my princely elder brother of Majapahit. That is now prevented by unlucky fate. Well, rejoice, princely elder brother, over the power of God, who clearly has ordained this.

206. Let now your mark of favour, namely that you will be as a brother to me, be fulfilled. Let it now come to pass that we become brothers in wounds, competing in blood-shedding. Practice no treachery, but try to follow knightly principles."

207. The other laughed loudly and said : "Well, my good younger brother, I won't think of doing anything treacherous, but only of acting as a knight ; I shall be pleased to do battle with you and to compete with you in the shedding of blood. Up younger brother, don't hesitate to strike."

208. The king of Sunda was furious and came up to strike him down. He couched his white lance with its golden knob, pearl point, and glittering pennant ; repeatedly he struck with his lance, but his opponent knew how to parry.

209. His shield, struck by many lance blows, began to show holes ; a shower of pieces came off it ; its pearls fell down. Then quickly up came the prince of Daha, and they jointly attacked the king of Sunda, who however remained undefeated.

210. For some time they tried to drive each other into a corner and then sparred with their lances ; both were battle heroes ; after that the braver hero,¹ who for some time had been harassed on all sides, was weary of defence. Suddenly he was outmanœuvred : a spear which came at him diagonally he managed to ward off, but he got a stab from the prince of Daha ; his chest was pierced. Also the prince of Kahuripan followed

¹ i.e. the king of Sunda.

him and struck the king with his lance. He fell backwards from his elephant; his soul escaped to Viṣṇu's paradise.

212. This event was accompanied by thunder, earthquake, soft rain, and other ominous natural phenomena; the sun's glow decreased; a rainbow appeared. Those Sundanese who had not been killed turned their flags, and all asked for their lives.

213. Pitar¹ was a survivor. He now approached the king of Majapahit's feet and, bowing, made a *sembah* before him, and weeping said: "Ah, sir, will you be indifferent

214. that Pitar here, Your Majesty's servant, in ceremonial manner comes to offer his homage, and surrenders his head and all that you may decree: many women still remain, the most fragrant part of your exalted Majesty's servant's *sembah*."

215. Pitiful were the words of him who supplicated for their lives and to whom tears stood nearer than laughter. The king was filled with mercy and contentedly he accepted. Now were matters discussed by the *mantris* of Majapahit.

216. They who had escaped with their lives approached the king's feet, they sat there with the three royal ones,² under the banyan: "Ah, exalted Sir, now the *mantris* and *tandas* are here; only a few survive of the youth, the bloom of the land."³

EXTRACTS OF PERTINENT MATERIAL FROM NOTES AT END OF BERG'S TRANSLATION

(1) ii, 38, 39. The places mentioned were in or near the kraton (palace) complex.

(2) ii, 54 ff. In the text the emblem of Hayam

¹ The *pati* of the princess of Sunda.

² The princes of Kahuripan and Daha, and Hayam-Wuruk.

³ In the first part of the Third Canto we are told how the queen, princess, and wives of the dead *mantris* of Sunda killed themselves with their keries on the battlefield.

Wuruk is given as a *makara*, of the prince of Daha as a water-hen, of the prince of Kahuripan a bull, of Gajah Mada a wild elephant. But Krom pointed out that in *Nāgarakṛtāgama*, xviii, 3 and 4, the emblem of the prince of Daha is a daha flower, of Hayam Wuruk a wilwa fruit, of the prince of Kahuripan is not mentioned, while that of the prince of Lasem is a white bull. Why the discrepancy? Berg suggests it may be because this is a campaign whereas the *Nāgarakṛtāgama* refers to a royal tour only.

(3) ii, 59. Bogor was perhaps situated in Ceylon or North Sumatra, whence elephants were exported to Java. Supratika, a traditional name for elephants, is of *Mahābhārata* origin.

(4) ii, 140. Reference is to the two giants who in the *Mahābhārata* schemed to get world mastery through their practice of ascetism. It was believed that they could only die by each other's hand, so Brahmā sent the nymph Tilottamā to arouse jealousy, as a result of which they fought to the death.

I shall now try to analyse such strategical and tactical material as the above account seems to contain, bearing in mind that we must not expect too much from an author who was a poet rather than a military expert.

The Majapahit army seems to have left the capital in an order not unlike the *makara* array we have already mentioned, in that the order was : troops of the *senāpati* (Gajah Mada), his *mantris*, the *senāpati* himself (stanza 51), the king on an elephant (53), the prince of Daha on an elephant, followed by his officers mounted on horses (55-7), the prince of Kahuripan on an elephant followed by his *mantris* who were on horseback (58-62). But by the time battle was joined the disposition of the army is given in greater detail and the position of the great chiefs has been changed. This follows the ancient Indian practice where the wings were under the real or

nominal command of princes. Now there is a centre with a vanguard, under the commander-in-chief Gajah Mada, a right wing (or eastern army) and a left wing (or western army). The left wing consists of the troops from Kahuripan and Daha, the names of whose commanders we were told in stanzas 39 and 41. These have now been joined by their princes who were "in the midst of their troops" while the *mantris* rode in front (83). The king was with the right wing (82). The princes, moreover, were to take part in actual combat in Epic style. The right wing advanced against Bubat along a river bank and had to contend with a part of the Sundanese force that had taken to boats.

The progress of the battle may be briefly summarized as follows: At first the Majapahit vanguard was repulsed and the right wing suffered a considerable defeat (92-4). The fighting on the left wing was more even but, apart from general tumult, it was mainly a matter of single combats among chiefs (97-8). Despite heavy losses, even to the guard, the Majapahit centre was rallied by its commanders and urged to new efforts (129). After several Sundanese knights had been killed in single combat, the rest were about to flee. But they were rallied by two chiefs, the one on an elephant, the other on a horse (138-140), who urged their men to attack the Majapahit centre. After these two heroes had failed and been killed, the king of Sunda, seeing how matters stood, resolved to make an attack (an amok indeed) with his remaining forces on the Majapahit left wing (177). Finally, the king of Sunda, who is left alone, is set upon and despatched by the princes of Daha and Kahuripan.

The short account of these events given in the *Pararaton* gives a few details which do not wholly agree with the above, but they do not suggest superior veracity, any more than do that chronicle's obscure reasons for the cause of the trouble. It is stated that the king of

Sunda was the first to be killed. This seems absurd, for such a disaster at the outset would almost certainly have ended the conflict at once. Then the decisive defeat of the Sundanese is put down to an attack by mounted Javanese *mantris*. Although by both accounts the *mantris* were mounted, this sounds too much like a concerted cavalry charge¹ to ring true. Despite this success, the *Pararaton* admits that a last attack was made by some Sundanese who had reached Gajah Mada's car and perished before it. The *Pararaton* chronicler seems to take a much more pro-Javanese and less magnanimous view than does the author of the *Kidung Sunda*.

In attempting to estimate the degree of evidential value that may be attributed to the *Kidung Sunda*'s account, I now propose to make some crucial tests of its character and content by comparison with the Epic. By this I mean not merely the Indian *Mahābhārata*, but the Old Javanese version of it known as the *Bhārata-Yuddha*.²

Do we find in the actual fighting in the *Kidung Sunda* the common use of chariots such as was the case in the Epic, but would be most improbable on Javanese terrain, especially at this late period? No, we find only one chariot or carriage used in the actual combat, that of the commander-in-chief. This is not entirely unbelievable. The analogy may be worth mentioning that, with the Sumerians, by 2800 B.C. the chariot had been generally given up in war, except by the king, who still rode in one.³

Is the mass use of elephants referred to, for this would be impossible because the elephant is not native to Java and had to be imported from Sumatra? No, elephants are the mounts of a few chiefs only. The use

¹ As indeed Krom takes it, *Geschiedenis*, p. 404.

² Dutch trans. by R. Ng. Poerbatjaraka and C. Hooykaas, in *Djawa*, vol. xiv.

³ C. L. Woolley, *The Sumerians*, p. 55.

of horses, too, is restricted to officers and, according to Raffles,¹ this was practically the case with the native armies of Java in later times, which consisted mainly of infantry.

Do we find the artificial laws and formalities of idealistic warfare to be adhered to, over and above what we know was the case even in the Epic itself? No, we find no mention of such artificialities as that each type of warrior fought against his like. We find laws of conduct broken, as in stanza 199 and where the king of Sunda is set upon by both princes (210).

Do we find mention of superhuman feats and of the miraculous such as are so frequent in the Epics, the miraculous that is to say as distinct from a belief in the supernatural as manifested in the validity of omens, magic, etc., which were, of course, fully believed in throughout South-east Asia? No, we find no warriors performing superhuman feats, over and above what could be expected of outstanding human heroes, and no mention of frankly miraculous weapons.

Do we find the bow pre-eminent as a weapon of practical value, supported by such Indian weapons as discus, clubs, tridents, and ploughshares? No, the bow is referred to only as borne by the two Javanese princes. Lance, javelin, and sword are the favourite weapons used by the chiefs, as by most South-east Asian warriors. The darts that in stanza 82 "threatened to rain" were most likely blowpipe darts, this weapon being mentioned as one of the arms of Javanese soldiers in stanza 89.

The use of cannon (still more of muskets) by Majapahit forces in the fourteenth century is impossible; but taken in conjunction with the lack of unreal Epic features, it tends to show that the author's ideas on warfare had been mainly formed by the contemporary scene. That is to say, it is additional evidence that the author was describing the archaic warfare still practised when he

¹ Op. cit., vol. i, p. 329.

wrote, and that he was not thinking in terms of Epic literature. Moreover, the introduction of artillery, except for siege work, can have made little difference to time-honoured forms of field warfare in Java in the sixteenth or seventeenth century, for in the sixteenth century that was the case even in the less advanced parts of Europe. In Italy Machiavelli had such a poor opinion of the efficacy of artillery "that he regarded it as practically useless when he wrote his *Arte della Guerra*, and only allowed that it might get off one or two discharges before battle was joined".¹

To sum up: Despite a certain exaggeration, despite formal and repetitive dialogues and the use of stock situations, the clichés of the Javanese literary style, there is sound reason to believe that the *Kidung Sunda* does provide a good general account, though not the technical description of a military man, of the sixteenth or seventeenth century Javanese warfare which seems to have still adhered closely to the old Majapahit pattern. There is, moreover, a possibility that the author had before him visual evidence of the appearance of Majapahit warriors and fighting. He several times (stanzas 39, 85, 98, 148) mentions pictures, which could then easily have been a century or more old, or may have been copies of old pictures. Unfortunately we do not know to what extent they merely represented Epic scenes, or whether they depicted old Javanese heroes and battles. In the latter case they would have had a documentary value comparable to that of the Bayon reliefs for Khmer warfare.

That my conclusion is likely to be right finds support from another and nearly contemporary literary source: the *Malay Annals*. Early in this work the author tells us of a certain Indian adventurer named Raja Suran who comes with his host to attack some strongholds on

¹ Sir Charles Oman, *The Art of War in the Sixteenth Century*, London, 1937, p. 50.

the Malay Peninsula. This is generally supposed to be a reference to the Cola raids of the eleventh century. But the author not only has vague ideas as to these events, he has no knowledge of Indian warfare as practised at that time, so he draws on his considerable familiarity with the Indian Epics. Thus, he treats us to a rather amusing misquotation of the artificial Hindu rules of fighting which prescribe that footman must fight footman, horseman must oppose horseman and so on, rules which, as we have seen, were never kept even by the Epic warriors themselves. When Raja Suran attacked a country named Glang Kiu its defenders came out to offer battle before its famous fort of black stone and "a dreadful noise arose, the elephants rushed against the elephants, and the horses bit the horses, and clouds of arrows flew across each other, and spears pierced spears, and lances encountered lances, and swordsmen encountered swordsmen . . .".¹

In more matter of fact terms the author tells of the fall of Malacca to the Portuguese in 1511, describing events that he had himself witnessed. Here we find nothing that is inherently impossible for there is no reason to doubt the considerable bravery displayed by the Malay defenders. Indeed, we seem in this short graphic episode to witness the death blow to an ancient and knightly tradition before the overwhelming might of the European conqueror. That the intention was to live up to traditional ideals of heroism cannot be doubted if we may believe that, as the *Annals* say, the young warriors, on the eve of the battle, said amongst themselves : "What is the use of sitting idly here ? Let us read a tale of war, which may be profitable to us." So they asked for and received from the Prince a book of tales of epic valour of former days. Then :

"When the day was lighted, the Frangis [Portuguese] landed thousands on thousands, with their whole host

¹ *Malay Annals*, trans. Leyden, p. 11.

and weapons of war. Sultan Muhammad quickly collected his hulubalangs [champions] and marched out to encounter the Frangis. The Prince mounted the elephant Juru Damang, with Sri Audana on the neck of the elephant and Tun Ali on the croup. The two armies met, and the battle began, the Malacca men closing up stoutly, playing their creeses and spears, and the Frangis again fell back. When Alfonso de Albuquerque perceived his men giving way, he quickly supported them with a thousand soldiers with their musketry, and set upon the Malacca men, and the sound of the musketry was like thunder, and their balls fell like pease on a sieve. This was a severe attack, and the whole array of the Malacca men was broken, and all the champions of the Prince gave way, and the Prince stood alone on his elephant. As soon as Alphonso de Albuquerque saw the Prince left alone he enclosed him quickly round with soldiery, and the Prince singly contended with a long lance against all these Frangis—curse them—and the Prince was slightly wounded in the hand, and lifted up his hand which was wounded, and cried, ‘You race of the Malays, are you not all ashamed to see me wounded here, take courage and stand by me.’ When the champions who had fled heard this, they all returned, and again made a furious onset and amoked the Frangis with their whole soul.”¹

¹ *Ibid.*, pp. 355 f.

CHAPTER V

KHMERS AND CHAMS

During the period fifth to eighth century A.D. the warfare of both Khmers and Chams, like the rest of their culture, had no doubt become very Indianized, though we have no bas-reliefs to testify to this in the graphic manner of Barabudur. We have, however, some definite statements from Chinese sources. These are especially valuable as regards the Chams, whose expansionist tendencies towards the north early brought them into conflict with the Chinese in Annam. We have already seen by what ruse a Chinese commander threw the Cham elephants into confusion in A.D. 446. Again, in 605, when the Chinese invaded Champa by sea, they were presented with the same problem. This time they overcame the difficulty, after they had landed, by directing all their arrow fire against the Cham elephants, and again obtained victory.¹

The Chams had already shown themselves to be poor neighbours to the Khmers by the fifth century, for the *History of the Southern Ch'i*² states that they were continually invading Fu-nan. The same history tells us that the king of Fu-nan rode an elephant, built palisades of wood, and had boats with bow and stern shaped like the head and tail of a fish. Of the military condition of the Khmers in the seventh century, before the Pre-Angkorian kingdom had undergone disruption, the *History of the Sui*, reproduced by Ma Touan-lin, gives us the following information : "More than a thousand guards wearing cuirasses and armed with lances are

¹ G. Maspero, *Le Royaume de Champa*, Paris, 1928, p. 83.

² P. Pelliot, "Le Fou-nan," BEFEO, iii, pp. 70 f.

ranged at the foot of the stairs of the throne, in the palace rooms . . . the custom of the people is always to go cuirassed and in arms, in such manner that the least quarrel leads to bloody combats."¹

It is soon after the establishment of the Angkorian kingdom that we begin to know more of the Khmer-Cham warfare which was to occupy much of the time and strength of the two rivals until the thirteenth century. However, the first attempts, about A.D. 813, by a Cham general named Senāpati Par, to test the now united Khmer state were never more than raids,² for Jayavarman II was a strong king and he was to reign for nearly half a century. A natural bellicosity and desire to expand whenever circumstances seemed propitious are sufficient reasons for the fighting of succeeding centuries. The same impulses actuated the Chams in their campaigns against Annamites and Chinese on their northern frontier, apart from their need to repel the Mongol invasion under Kublai Khan's general Sagatou.

Probably the Chams, owing to their early Chinese experience and training, remained more skilled at realistic warfare, despite Indianization, than were the Khmers. Their knowledge of stratagems must perforce have been sharpened by their continual quarrelling with the Chinese on their northern frontier. Nevertheless, the Chams seem usually to have been strong enough to face the Khmers in pitched battle.

We may suppose that, except for certain traditional peculiarities, especially in regard to attire and favourite weapons, the strong Indianization common to both and the necessary give and take among habitual opponents, must have led through mutual loans to a fairly homogeneous art of war in both cases. To give a couple of

¹ Ma-touan-lin, *Méridionaux*, trans. d'Hervey de Saint-Denys, 1883, p. 479.

² G. Maspero, op. cit., p. 106.

examples : the gall and the ballista, both of Chinese origin, though first used by the Chams, became in due course incorporated into the Khmer equipment. Consequently, for the Khmer-Cham warfare of the ninth to thirteenth centuries I feel justified in giving here a combined account, although without definite evidence we cannot be sure that every detail applies to both protagonists.

Chinese sources give much valuable information, but it is almost entirely, as one would expect, about the Chams, of whom the Chinese had so much first hand experience.¹ The evidence of Khmer and Cham inscriptions is more plentiful in those dating from the ninth and tenth centuries than it is in later times. This is probably because such information is contained mostly in the eulogies of kings. In the later centuries kings became less active as war leaders ; hence their warlike qualities are then extolled in vaguer terms. These eulogies are often redolent with *Mahābhārata* comparisons, but, as I have already sought to establish, this does not in itself destroy their documentary value, for the reason that the Indian Epics were a primary medium of Indianization. Boasting and exaggeration in panegyrics of kings are to be expected and can be duly discounted. But what gives confidence in the reliability of the military information wrapped up in them is the absence of chariots, of really superhuman feats, and of the miraculous element so ubiquitous in the Epics. Indian weapons could be more legitimately expected in these inscriptions than in the much later Javanese literature that we were considering in the last chapter.

The evidence of the inscriptions is supplemented by that of the bas-reliefs. Except where it is a question of some points of detail concerning accoutrements and weapons it will be wiser to confine our attention to twelfth century reliefs : the famous royal procession

¹ It is readily accessible in G. Maspero's book, to which I shall refer.

(*galerie historique*) of Angkor Wat,¹ and, more important for actual warfare, the exterior galleries of the Bayon² and the similar representations of Bantéay Chmar. The rest of the Angkor Wat reliefs, and most of those of the interior galleries of the Bayon (which include, however, another royal procession at the ends of the east face) are concerned with the Epics and Indian religious legends. Leaving aside the utterly fantastic representations of the Hindu legendary scenes, we shall do well, since we have really no need of them, to eschew also the *Mahābhārata* scenes, for there it was undoubtedly not Khmer warfare that the artists intended to depict. Yet this last fact seems to escape Groslier when, in his painstaking and generally valuable analysis of the bas-relief scenes, he supposes that the chariots shown on the reliefs of Angkor Wat were used in combat by the Khmers.³

The dry season was naturally the usual time for warlike undertakings, beginning when there was no longer a chance of seeing a rainbow in the sky.⁴ Mass levies were certainly needed when an important campaign was afoot. This is indicated not only by Tcheou Ta-kouan⁵ for the wars against Siam in the thirteenth century but also by an early eleventh century inscription.⁶

¹ *Le Temple d'Angkor Vat*, part iii (*La Galerie de Bas-Reliefs III*), in *Mémoires Archéologiques*, tome ii, Paris, 1932.

² *Le Bayon d'Angkor Thom* (*Mission Dufour*), Paris, 1914.

³ George Groslier, *Recherches sur les Cambodiens*, Paris, 1921, p. 98. Coedès seems to be under the same misapprehension when he says: "It is known that the (Khmer) armies comprised four divisions: infantry, cavalry, elephants, chariots," in referring to a word in a twelfth century inscription meaning "divisions" (*BEFEO*, xxix, p. 315, n. 4). In the Siamese army, chariots, as one of the divisions of the classical fourfold army of India, had been replaced by artisans; as the twelfth century Khmers did not use chariots (they had been given up in India since the seventh century), it was probably they who originated this substitution.

⁴ Inscr. of Prè Rup, A.D. 961, trans. by G. Coedès, *Inscriptions du Cambodge*, i, Hanoi, 1937, stanzas lxiii, cxlv, pp. 114, 125.

⁵ *Mémoires sur les Coutumes du Cambodge*, trans. P. Pelliot, *BEFEO*, ii, p. 54; New version, Paris, 1951, p. 34.

⁶ Inscr. of Koh Ker, trans. G. Coedès, *Inscr. du Cambodge*, i, p. 51.

Besides the Khmers, contingents were also recruited from vassal peoples, notably the Siamese shown in the Angkor Wat procession, where they are labelled "These are the Syām Kuk". But Coedès was incorrect¹ in supposing that soldiers only clad in belts (like Moïs) were vassal troops, for this is the basic garb of Khmer soldiers who lack, or who have discarded, their vests or coats.

The Hindu concept of war as a religious sacrifice was fully recognized by the Khmers.² The riches taken from the enemy villages might be regarded as the sacrifice, after which the king might claim to have carried out a further sacrifice conformable to the Veda, like that of Yudhiṣṭhīra, which Coedès points out would be the horse sacrifice.³ The wounds of the enemy were poetically described as the ritual flowers offered in "this sacrifice which is battle".⁴ The Rājahotar, or royal sacrificer, has an important position in the royal procession on Angkor Wat.

Apart from this recognition of war as a sacrifice, light is thrown on an aspect of the Khmer religious preparations for a campaign, in a late eleventh century inscription.⁵ Here it is stated of a certain *senāpati* Saṅgrāma, a Khmer general sent to quell a rebellion, that before starting he visited the sanctuary of Śiva of the Prīthusaila (the wide mountain), paid homage, and made offerings of gold, silver, and elephants, and implored victory over the foe. After gaining the victory he once more paid homage to the Śiva of this mountain sanctuary ; and the rich presents he made to the shrine are enumerated. This is of special interest because it shows the fundamental desire of the Khmers to associate

¹ *Le Bayon d'Angkor Thom* (Mission Dufour), Paris, 1914, p. 23.

² Inscr. of Mébon, A.D. 952, cxxvi, trans. L. Finot, BEFEO, vol. xxv.

³ Inscr. of Prè Rup, cxviii, loc. cit., p. 130.

⁴ Ibid., xv, p. 120.

⁵ Inscr. of Prea Ngouk, face C, stanzas 32, 51–56, in Barth and Bergaigne, *Inscriptions sanskrites du Cambodge*, p. 166.

the ancestor mountain god, Hinduized as Śiva, with the venture, and thus to obtain his aid in bringing about its success.

At about the same time, in Champa, A.D. 1064, Rudravarman III, contemplating an invasion of Annam, made some splendid gifts to the goddess of the kingdom Yāñ Pu Nagara "to show her his devotion". The gifts included a vase with lid and plate, some solid silver vases, a silver Cambodian jug, and a golden parasol.¹ The intention was the same as with the Khmers, though the goddess, we may note in passing, was not specifically associated with a mountain.

Another point that may be noticed here, in connection with this religious aspect, is the frequency with which it is mentioned in the Khmer inscriptions that the king made conquests in the four directions or over the four quarters.² The king's divine power was held to be derived from his connection with Śiva through the axis of the sacred mountain, of the palace built in its likeness, and which thence radiated out to the four quarters. The offerings made to the deity before a campaign were undoubtedly to assure that this power accompanied the king or his generals on their missions to subdue the royal enemies in each of the four directions.

It has been suggested³ that a single combat shown as taking place to the right of the naval battle on the Bayon reliefs, represented a ritual contest in which one man stood for the enemy. Such was the custom with the Greeks, according to Plutarch, the winner, of course, always to be a Greek, and an omen of Alexander's victory was obtained in this way. If there is substance in this suggestion (and it is by no means certain that there is), a survival of it may possibly be recognized in

¹ G. Maspero, op. cit., p. 140.

² e.g. Inscr. of Prè Rup, xxxvi, cxlvii, loc. cit., pp. 110, 125.

³ P. Paris, "Les Bateaux de Bas-reliefs Khmers," BEFEO, xli, p. 345.

the Siamese rite, noted by Pallegoix,¹ of decapitating a dummy representing the enemy, just before the forces embarked.

Prior to the start of the royal procession on the Angkor Wat reliefs the king is shown conferring with his ministers and generals. The commander-in-chief (*senāpati* or *mahāsenāpati*) was usually a prince, both with the Khmers and Chams, often the king's brother. But, at least in later times, the title *senāpati* was often given to members of the royal family without any connotation of generalship.² Of other officers we have little detailed knowledge. However, we have a short biography of a certain Pracaṇḍasimha, worthy member of a family of Khmer dignitaries in the reign of Jayavarman I. His first appointment was the very honourable one of recruiter of the royal guards. Then, having received the title of Samantanauvāha, he became chief of the rowers, and was finally advanced to the seemingly more combatant post of captain "of a thousand men from Dhanvipura, going to war".³

The officers, like the princes and the king himself, were always accompanied by their parasols (white in the case of the king), banners, and other marks of distinction.⁴ This is clear from the way they almost fill the background in the scenes of parade on the reliefs, as well as from the remark of Tcheou Ta-kouan, who said of the princes and ministers that "their red parasols are innumerable". The parasol of a defeated leader on his elephant is often shown with broken handle. Another type of functionary of importance in war as in peace was the astrologer. He is mentioned both in inscriptions and by Tcheou Ta-kouan, but we have no direct knowledge of his activities.

¹ Pallegoix, *Description du Royaume Thai ou Siam*, i, p. 315.

² Inscr. of Ta Prohm, A.D. 1186, trans. by Coedès, *BEFEO*, vi.

³ Inscr. of Tañ Krañ, xvi-xix, trans. Coedès, *Inscr. du Cambodge*,

i, p. 11.

⁴ For detailed descriptions, see Groslier, op. cit., ch. viii.

As to the numerical strength of the forces at the command of Chams or Khmers it is difficult to obtain any trustworthy statistics. According to the earliest Chinese information, relating to the period of Chinese influence in the fourth century A.D., Fan Wen disposed of 40,000 to 50,000 men. This number was later much increased; in the eighth century the royal guard alone numbered 5,000.¹ With the Chams the infantry formed the greater part of the military strength,² and no doubt it was the same with the Khmers.

A Khmer inscription³ mentions troops of horses as forming part of the royal army, and a Chinese source mentions a small force of 400 horse accompanying the Cham king to war.⁴ But it seems clear from the bas-reliefs that the use of horses was in practice almost confined, as in Java, to officers in command of infantry units. Even in the Angkor Wat procession, from which the mass of infantry is absent, nearly all the horsemen are followed by parasol bearers, showing that they are intended to represent officers. This is also borne out by what one sees in the scenes of actual combat on the Bayon reliefs. It is further supported by the known rarity of horses in these kingdoms, which we shall see is confirmed below by the record in Chinese history of the failure of the Chams to introduce horse archery. Angkor Wat would give an entirely wrong impression were it not borne in mind that this is essentially a parade of chiefs alternately mounted on elephant or horse, these being separated by small escorts of footmen.

Both Chams and Khmers relied very considerably on their elephants, and it seems that, despite the success of some early Chinese tactics directed against them, they were sometimes used to good effect against the Annamites

¹ G. Maspero, op. cit., p. 27.

² Ibid.

³ Prè Rup, lxxii, loc. cit., p. 116.

⁴ G. Maspero, loc. cit.

in later times.¹ The elephant corps forming a division of the Cham army is said to have often attained 1,000 head.² We do not know exactly how they were employed tactically, apart from the fact that, as we can see from the Bayon reliefs, when ridden by chiefs they must often have been involved in single combats in the general mclée. In such fighting the elephants themselves took a prominent part, rending the opposing animals with their tusks or catching any near-by foot soldiers in their trunks and hurling them into the air. Unlike the Indian custom, only one warrior rode each elephant. Before him, on the elephant's neck, sat the mahout, often shown as having a shield on his left arm. In the Angkor Wat procession the warrior often stands erect on the platform, sometimes then steadying himself by holding a cord attached to the balustrade.

With the Chams the baggage train was made up of pack elephants and perhaps some mules.³ Of the Khmer camp followers, as they appear on the Bayon reliefs, Groslier has written as follows : " In the numerous troop movements a veritable cohort of people serve as followers. The east face of the Bayon is typical : one sees women of all sorts, of which some carry musical instruments (harps) ; others their child on hip, shoulders, or head ; ox carts follow, heavily laden ; pack elephants are loaded with sacks ; the porters of game (deer suspended by their feet from crossbars), torches, boxes, gourds, jars, etc. Pigs are led on strings. Under an unyoked cart a fire has been lighted and rice is cooking in this improvised bivouac."⁴

The use of carts reminds one that there were some excellent roads in Cambodia, the embankments of which can still be distinguished among the forests and waste land. There were six main arteries, all except one

¹ G. Maspero, op. cit., pp. 194, 214.

² G. Maspero, op. cit., p. 27.

³ Ibid.

⁴ G. Groslier, op. cit., p. 87.

radiating from Angkor,¹ and we may suppose that these were used for military purposes. An inscription referring to the Cham invasion of A.D. 1177 speaks of the Cham king "transporting his army on *ratha*".² Since *ratha* must mean carts not chariots, the question arises as to whether infantry were sometimes saved some of the arduous of the journey in this manner. There appears to be no other evidence in support of it.

According to Chinese texts, Cham weapons consisted of "shields, spears and halberds, bows and crossbows; the arrows, of bamboo, were not feathered, but the points were poisoned".³ Cham sculptures show also swords and daggers. There is good reason to believe that from early times the Chams possessed the keris, though, as in Java, this does not appear to have been a recognized weapon during the classical period, being absent on the sculptures. Some apparently ancient examples have been found⁴; and it is of interest to note that the Cham auxiliaries serving in the Siamese army of the early part of the nineteenth century are shown in a Bangkok temple fresco as armed with the keris as their distinctive weapon.⁵

The lance or spear is the commonest of the Khmer weapons, cases of them being attached to the sides of the elephant platforms. The *phkăk* is seen less in actual combat than in processions. By the twelfth century it largely replaced the sword and is the most distinctive of Khmer arms. Persisting among the modern Moïs, and finding its way into Malaya's iron age culture as the *tulang mawas*, the *phkăk* seems to be of very ancient origin, even though, like the keris in Java, it may have only returned to favour as a warrior's weapon after

¹ Ibid., p. 95.

² BEFEO, xxiv, p. 324.

³ G. Maspero, op. cit., p. 27.

⁴ M. Colani, "Essai d'Ethnographie Comparée," BEFEO, vol. xxxvi, pp. 225-7.

⁵ JSS, vol. xxvi, p. 160.

Indianization was on the wane. While I can only mention the similarity with great reserve, it is interesting to note the resemblance of the *phkăk* to a Sumerian weapon described as "a scimitar-blade of thin copper attached to a crooked wooden handle by copper bolts and a gold band".¹

Swords and daggers were also in use, the latter often worn in sheaths suspended from belt or collar, or attached to the cuirass. The club, the weapon of the Khmer gate guardian, is relatively rare in the hands of warriors. Bows and arrows are present in every scene of combat. For close fighting the elephant warrior lays aside his bow in favour of javelin or spear. The cross-bow and the ballista, not mentioned in inscriptions, seem to have been introduced from China, via Champa, late in the twelfth century, since they do not occur on bas-reliefs prior to the Bayon.

The cross-bow, as we have seen, had long been known in Indochina to the Chams at least. The ballistas, of several types, and carried on elephants or mounted on wheels, which make such a sudden appearance on the Bayon reliefs, have been made the subject of a technical study by P. Mus.² He has shown that they were developed in China in response to the great progress in the art of fortification there, and that they were introduced by the Chinese into Champa. The Khmers would then be likely to copy them. That they actually did do so is supported by the probability that there were Chams in Jayavarman VII's army; also by the fact that one of the ballistas shown following a Khmer army is served by two soldiers who are evidently Cham since they wear flower-like head-dresses.³ So here Cham specialists are playing a part comparable to that which would in later Indochinese armies be played by Portuguese artillery.

¹ C. L. Woolley, *The Sumerians*, p. 54; the weapon is illustrated in L. Delaporte, *Mesopotamia*, London, 1925, Fig. 9.

² P. Mus., "Les Balistes du Bayon," *BEFEO*, vol. xxix, pp. 331-341.

³ *Ibid.*, pl. xlvi B.

men. They follow in the rear of the Khmer army, with the spare horses. Since they take no part in the battle scenes it seems clear their use was for siege work.

A weapon that is only mentioned once in Khmer inscriptions¹ is the discus. It is said of Jayavarman V that "when like the discus-bearer (*Viṣṇu*) he threw his discus in battle . . .". Since the discus is not seen on the bas-reliefs and is not mentioned elsewhere, one may well doubt if it was indeed ever used by the Khmers. However, one must note that the inscription is relatively early.

The ancient Khmer weapons were often richly ornamented. An inscription mentions "swords with gold hilts" and "shields adorned with gold, lances adorned with silver".² The statement of Tcheou Ta-kouan³ that when he visited Cambodia the Khmers were armed with lance and shield only, cannot be accepted. But it does suggest that by that time there had been sufficient decay in the Khmer armament for the lance and shield, the basic weapons of South-east Asians, to be most in evidence. As will be seen below, there is some reason to believe that he may have been right when he said that, except for the king, the Khmers had no helmets or cuirasses, at least for use in actual combat.

Besides their shields the Chams, at any rate in earlier times, had cuirasses for protection, which according to the Chinese texts, were of plaited cane.⁴ So, indeed, had the Khmers, but by the twelfth century these seem to have been generally used only for parades. While they are shown in the royal procession, as worn by all except the archers who only have little vests, they are absent from scenes of actual fighting. Then only the king wears

¹ Inscr. of Prasat Komphu's, A.D. 972, xxxii, Coedès, *Inscr. du Cambodge*, i, p. 177; and its copy, the inscr. of Prea Eynkosey, Barth and Bergaigne, op. cit., p. 91.

² Inscr. of Prah Kō, late ninth century, xxxii, xxxiv, Coedès, *Inscr. du Cambodge*, i, p. 28.

³ Tcheou Ta-kouan, op. cit., trans. P. Pelliot, *BEFEO*, ii, p. 53.

⁴ Maspero, op. cit., p. 27.

a cuirass, as he seems to have done on all occasions, for Tcheou Ta-kouan says that he had "his body sheathed in armour so well that even knives and arrows striking it could not wound him".¹ The Khmer soldiers often fought in their belts only, but their full dress seems to have included a short-sleeved short vest, or longer cut-away coat.

Shields were round or rectangular, the latter arched or convex, and often with the upper part decorated. Large shields were adapted to the platforms of the war elephants. On Bantéay Chmar an alignment of five shields to form a rampart is seen²; and on the Bayon two giant spearmen stand behind a tall shield mounted on wheels and pushed by other footmen.

Helmets of various types, sometimes topped by animal emblems, also by the twelfth century belong to royal processions not to actual combat. The Khmers fought bareheaded, though the Chams are shown wearing their peculiar reversed flower head-dresses. It has been suggested³ that these may be of Indian origin since something similar appears on the Ajanta frescoes. Heine-Geldern has drawn attention to the strange resemblance of the helmets of certain Nias islanders to those of the Khmers: "The helmets of Nias with their ornaments of golden or gilt metal boughs find their nearest counterpart in the helmets of ancient Angkor in Cambodia."⁴ Further research may show whether the resemblance is due to direct borrowing, to a common early Indian influence, or to a common prehistoric basis.

While a single Cham inscription remarks that the king "is skilful in the use of all arms",⁵ a boasting of weapon

¹ Tcheou Ta-kouan, loc. cit., p. 54.

² Groslier, op. cit., p. 87.

³ By Coedès in *Le Bayon d'Angkor Thom* (Mission Dufour), p. 23.

⁴ R. Heine-Geldern, *JISOA*, 1937, p. 158, note 2.

⁵ Inscr. of Jaya Indravarman, A.D. 1170 in R. C. Majumdar, *Champa*, Lahore, 1927, No. 81, Book III, p. 199.

knowledge is commonplace in the eulogies of Khmer kings. In ancient India the word *Dhanurveda*, though originally applied to the bow (*dhanu*) is usually held to have come to mean the art of weapons generally. So far as is known to me it is actually mentioned in only one Khmer inscription, and there it has definitely its original sense of knowledge of the bow : " Twanging his bow with a lively noise, showing himself as the *Dhanurveda* incarnate, he showed his superiority in the art of handling the bow." ¹ The same inscription later refers to " the position of the bow named *mandala* . . ." ; and Coedès remarks in a footnote that this is known from *Śabdakalpadruma*, iii, 441, citing an extract from the *Dhanurveda* explaining the stanza.²

Other references to the Khmer king's dexterity with the bow are in the following terms : " Filling the cardinal points with the sound of his bowstring, he made to shower down in the combat an abundant rain of arrows." ³ " Although he was the first among archers, twanging his bow and filling space with the sound of its string, he was so skilled that he could if he wished, handle his bow without making any noise at all." ⁴ More simply : " he carried out in a superior manner the usual handling of bows." ⁵

Sometimes the Khmer king's skill in other weapons was extolled : " The renown acquired by this king (Rājendravarman) in the science of arms . . . it was a game for him to cut in three a large bar of iron, striking it lightly with a single blow of his sword, as though it had been a banana stem. What's the use of speaking of the blow of his sword on the enemy's body made of flesh ? " ⁶ ; " Making his arrows pierce objects as thin

¹ Inscr. of Prè Rup, clii, loc. cit., p. 125.

² Inscr. of Prè Rup, exciv, loc. cit., p. 180.

³ Inscr. of Prasat Komphu's, xv, loc. cit., p. 175.

⁴ Inscr. of Prè Rup, xxv, loc. cit., p. 109.

⁵ Inscr. of Mébon, A.D. 952, cxxix, trans. Finot, BEFEO, xxv.

⁶ Inscr. of Prè Rup, xxii, xxiii, loc. cit., p. 108.

as stalks, cutting all the heads of his enemies, bearer of the sword, bearer of the baton, crushing the frontal bosses of the elephants, he showed in the science of arms exceptional dexterity.”¹

A knowledge of charmed weapons and of the means of securing invulnerability is shown in the following extracts : “ clever at handling the magic sword ”²; “ thanks to the powerful magic of his formulas and of his herbs, his enemy’s sword couldn’t cut a shoot of blue lotus, as though it had been iron. What’s the use of speaking of his body, comparable to diamond ? ”³ Rather less confidently : “ Although his body was invulnerable, he stopped the missiles of the enemy by means of protective screens which threw them back.”⁴

War magic and the quest for invulnerability, indicated in the above quotations, no doubt formed a major part of the military preparations of Khmer and Cham soldiers of all ranks. Unfortunately we have no details, except as to the use of human gall in sympathetic magic. The custom was noticed in Cambodia by Tcheou Ta-kouan,⁵ the Khmers having probably derived it from the Chams in whose inscriptions there is mention of “ the supreme king of kings . . . possessor of the elephant bathed with gall, *pittadvipa* ”. Its use was not confined to elephants : “ The Chams have a barbarous belief that human gall, taken as a drink, is a splendid stimulus which makes one terrible in war. One takes it alive, from the wounded enemies. Mixed with rice spirit, it gives a drink that makes the body thrill, say the Indochinese ”.⁶

Apart from their palisaded camps which they used as temporary strongholds, or the use of war boats drawn

¹ Inscr. of Prè Rup, xxix, loc. cit., p. 109.

² Inscr. of Ta Prohm, Jayavarman VII, A.D. 1186, xxvii, trans. by G. Coedès, *BEFEO*, vol. vi.

³ Inscr. of Prè Rup, xxiv, loc. cit., p. 109.

⁴ Inscr. of Prè Rup, lxxxiv, loc. cit., p. 117.

⁵ Tcheou Ta-kouan, op. cit., trans. Pelliot, *BEFEO*, ii, p. 51.

⁶ Ibid., p. 51, note 4 : quoted from Aymonier.

up on land to form a defensive square,¹ the Chams and Khmers both had considerable knowledge of fortification. The defences of a Cham capital are thus described in an early Chinese text : " Its ramparts were formed by a first course of bricks six li and a hundred and seventy paces round ; and measuring from east to west 650 paces ; this first course was 20 feet high ; above rose a wall of bricks 10 feet high and pierced by square loopholes ; the wall itself was surmounted by palisades, and the whole was dominated by pavilions and towers reaching 70 or 80 feet. The town had thirty gates."² And Claeys has made a detailed comparison of the remains of the Cham citadel at Tra-Kiêu with the data provided by Chinese texts.³

What the Khmers could do in the fortification of their capital is well known from the massive stone walls of Angkor Thom, which replaced in the twelfth century earlier defences of moat and mound. For details the reader may refer to the architectural works. Although the newly introduced ballistas were primarily intended for siege work, it seems probable that the larger Cham and Khmer cities and strongholds were seldom taken except by treachery and surprise. Thus, in A.D. 1177 Angkor fell to an unexpected Cham naval attack, the land fighting having been indecisive. Captured enemy cities were often burnt.⁴

A Cham army on the march was accompanied by the music of conches and drums, we are told in Chinese texts⁵ ; and every defile of Khmer forces shown on the bas-reliefs shows frequent orchestras attending the marchers. Most noticeable is the large gong beaten with two sticks by a little man, who gambols beside it, his

¹ G. Maspero, op. cit., p. 216.

² Ibid., p. 28.

³ J. Y. Claeys, " Simhapura, La Grande Capitale Chame," *RAA*, vol. vii, 1931.

⁴ Inscr. of Mébon, cxlvii ; Inscr. of Prè Rup, xxviii, loc. cit., p. 109.

⁵ G. Maspero, op. cit., p. 27.

diminutive size probably being a convention to allow the gong to be seen. "When he (Jayavarman V) sets out on the march," states an inscription,¹ "with the noisy drums with which agreeably mixed the sonorous copper cymbals, with the *karadi*, the *timila*, the lutes, the flutes, the bells and the tambourines, with the *purava*, the tymbals, the *bheri*, the *kāhala*, and the multitude of conches, he continually inspired terror into the enemy by the multitude of his instruments of music."²

Stringed instruments, whose sound was so much softer than that of drums and trumpets, are rarely seen on the march, being reserved rather for palace and camp. So we can deduce that while the martial music might serve to embolden the men, its further purpose was that of frightening the enemy. And with this object in view it was carried right on to the battlefield: "By the terrible and repeated noise of his (Rājendravarman's) drums in the combat, the kings of the kings, like a herd of oxen seized with fear . . ."³ were no doubt completely discomfited.

On the march, or while resting in camp, the Khmer soldiers sometimes practised with mock duels. Probably this was the full extent of their training for combat, since according to Chinese reports neither Khmers nor Chams did much in this way.⁴ On the reliefs of Bantéay Chmar a duel is shown in progress in which two warriors are sparring with lances whose iron heads are covered by balls.⁵

The battlefields were usually the hard baked plains from which the padi had been harvested and, as in

¹ Inscr. of Prasat Komphu's, xxvi, xxvii, loc. cit., p. 176.

² For descriptions of the various Khmer musical instruments, see Groslier, op. cit., ch. xii, with illustrations; with these may be compared Hopkins' account (loc. cit., pp. 318-321) of the martial music of India, including mention of the *bheri*.

³ Inscr. of Prasat Komphu's, xiii, loc. cit., p. 175.

⁴ G. Maspero, op. cit., p. 140, n. 3.

⁵ G. Groslier, op. cit., p. 87.

ancient India, perhaps their chief characteristic was dust : "The earth in its anger transforming itself into dust during the march of this king (Rājendravarman), hid the sun in sight of producing Fortune"¹; "the dust raised by his (Rājendravarman's) army on the march."² But an inscription of King Bhadravarman III of Champa succeeds in giving a little more varied picture of the typical battlefield : "He, the king of Champa, like the son of Pāṇḍu, shines by his splendour in the battlefield ; which is grey with the dust raised by the swift moving sharp hoofs of horses galloping high ; whose surface has been died red with drops of blood like Aśoka flowers, shed by means of various weapons ; and in the four regions of which the sound of war-drums were drowned by the roars of gigantic beautiful elephants."³

King Rājendravarman's forces were ready to meet an enemy army "even as numerous as his own"⁴ ; and even though "he knew the stratagems",⁵ he claimed to be above making use of anything that savoured of realism.⁶

In idealistic warfare the sole object of strategy, as we have said earlier, was to bring about a pitched frontal battle. That this might be successful, an important preliminary was to choose a suitable site for the battlefield. But where it was necessary to meet an invader who had the initiative, this might not be possible. So Jayavarman VII found when combating the Cham invasion of A.D. 1177. Then, states an inscription,⁷ he had "to begin a fight rendered laborious by Yāma who was situated in the south, and which was lacking in prowess owing to the heat of the sun. . . ." The meaning

¹ Inscr. of Prè Rup, cxlvii, loc. cit., p. 125.

² Inscr. of Prasat Komphu's, xii, loc. cit., p. 175.

³ Inscr. of Hoá-Qué, A.D. 909, trans. R. C. Majumdar, op. cit., p. 118.

⁴ Inscr. of Prè Rup, lxxiv, loc. cit., p. 116.

⁵ Ibid., ci, loc. cit., p. 119.

⁶ Ibid., civii, loc. cit., p. 126.

⁷ Trans. G. Coedès, *BEFEO*, vol. xxix, p. 324.

of this obscure passage is explained by Coedès in footnotes. The intention was to convey that in this campaign (which ended in the Cham capture of Angkor), the Khmer soldiers lacked vigour by reason of the heat of the sun, and the reason for this can be found in Kauṭilya's *Arthaśāstra*, where it is laid down that "the army should be arrayed in a favourable position, facing other than the south quarter, with its back turned to the sun, and capable to rush as it stands."¹ In this battle it was the Chams, not the Khmers, who obeyed this injunction; and the heat may well have been intolerable if, as Coedès says, the combat took place in the month May-June.

Tcheou Ta-kouan² did not observe that the Khmers had any strategy or tactics, but he was looking, if at all, from a Chinese and not from an Indian point of view. In ancient Indian war of the idealistic variety, tactics consisted mainly in the choice of an appropriate battle array, and we have one precious piece of evidence that the Khmers and Chams followed Indian precepts.

The inscription of Prè Rup says in a matter of fact way that inspires confidence that Rājendravarman broke "the enemy army which had protected itself by the *cakra* array".³ Such an array (*vyūha*), according to Kauṭilya, was considered suitable for use on level ground.⁴ Like the *padma*, it is a synonym of the *maṇḍala* or circular array, and what were the distinctions, if any, between them is not known.⁵ "The *maṇḍala* has been defined as a battle order in which the wings, flanks, and front stood in close proximity to one another, without having any intermediate space between them."⁶ In the *Mahābhārata* it was the most dreaded of all arrays,

¹ *Arthaśāstra*, x, 3, trans. R. Shamastry, p. 397.

² Tcheou Ta-kouan, op. cit. trans. Pelliot, BEFEO, ii, p. 54.

³ Inscr. of Prè Rup, cl. loc. cit., p. 125.

⁴ P. C. Chakravarti, op. cit., p. 115.

⁵ E. W. Hopkins, loc. cit., p. 210. The Siamese, as we shall see (Chap. VII) distinguished clearly between *cakra* and *padma* arrays.

⁶ P. C. Chakravarti, op. cit., p. 114.

reputed to be invincible on all sides. Consequently, it would be interesting to know how Rājendravarman broke this array. If he had broken it on the Epic model he would have employed a narrow and compact column, such as the Pāṇḍus are supposed to have used against the circular arrays of the Kurus. "On the first day the *maṇḍala* was met by the *sūcī* (needle) order, and on the seventh it was answered by the long phalanx (*rajra*) order. The tactical difference between the *sūcī* and *vajra* arrays seems to be nil. If there is any, it is simply in the width of the columns of the army."¹ But the fact is that we do not know how the Khmers employed their arrays.

The Khmer kings claimed to be masters also of the artifices of realistic war, even though, as we have seen, they scorned to use them. But, since our scanty knowledge of the tactics employed in Khmer-Cham fighting comes exclusively from Khmer inscriptions, it need not be accepted, as is represented to be the case, that the Chams alone stooped to realistic method. However, there is some reason to believe that they may have been more skilled in it, partly owing to the Chinese element in their genius, and partly owing to the experience they gained in fighting the Chinese. In A.D. 1284 the Cham guerilla tactics met with a good measure of success against the Mongol invaders under Kublai Khan's general Sagatou.²

An interesting example of realistic tactics said to have been used by the Chams against the Khmers is recorded in an inscription of the reign of Jayavarman VII. It concerns an expedition that his son Śrindrakumāra had led against Champa before Jayavarman had actually come to the throne: "Formerly the prince had gone to Champa. After he had taken the fortress that the Cham king Jaya Indravarman had made on the mount Cek Katāñ, the prince returned. The Cham generals,

¹ G. T. Date, op. cit., p. 78.

² G. Maspero, op. cit., pp. 181-183.

headed by Krvay Bhā Yāñ Mahātāla, led the Chams. At the time of 12 *aphuy* (noon ?) the vanguard of the Cham army, taking a short cut, secretly followed the Khmers and by a ruse surprised their rearguard which was not able to mass. The prince made all his forces return in order to bring help to his rearguard. Arrived at the mount Traya, he advanced against it just when the Chams were reassembling their vanguard to assault the mountain. The Khmer rearguard was completely broken ; only thirty men were left. The prince came down and fought to the foot of the mountain. The Chams surrounded the prince, whose men were all too terrified to fight. Just then two nobles, the anak Sañjak Śrī Deva and the anak Sañjak Śrī Vardhana, who were relatives of the prince, made a vow. . . . They came up to the prince and told him of it. Then they fought and threw themselves before him who sheltered behind them, and they repulsed the Chams who came up in great numbers ; once struck down to earth they had only their bare hands with which to fight. The Chams, striking with their lances, mortally wounded them. They fell faithful to their vow. . . . The prince ordered royal rites (for them) . . . arrived at the country of Kambuja he conferred upon the two anak Sañjak the title of *amten* and raised statues to them.”¹

Coedès says that the whole passage is written in such extremely concise language that in places the translation is hypothetical. But the general sense is clear. As indicating how reprehensible were the Cham tactics considered to be, it is interesting to note that the Khmer word used for “stratagem” is the same as the one used in the inscriptions of the Angkor Wat hell scenes to describe the actions of a category of malefactors who are there shown expiating their crimes in company with thieves and cheats.²

¹ Trans. G. Coedès, BEFEO, vol. xxix, pp. 312-315.

² G. Coedès, loc. cit., p. 318, n. 4.

In A.D. 1172 there occurred an event which, had it been possible to exploit it in the way King Jaya Indravarman of Champa hoped, would have revolutionized Cham warfare and probably that of the Khmers as well. In that year a Chinese officer, shipwrecked on the coast of Champa, taught the king the art of manœuvring cavalry and of horse archery. The king was delighted at these tactics and commissioned the Chinese to go and obtain some horses for him in China. With the help of these the king gained some advantage in the invasion of Cambodia which, having assured peace with Annam, he then proceeded to launch. He tried to obtain more horses from Hainan, but the Chinese emperor issued an edict prohibiting all export of horses from the empire. Jaya Indravarman was therefore obliged to give up his intention of adopting the new tactics on a large scale.¹

This occurrence is of special interest for the light it throws on some of the mechanics of culture change. Although there was so much friction with the Chinese and Annamites to the north, there seems to have been little peaceful intercourse. It would seem that warlike contact alone is not a fertile means of introducing innovations. Thus, the wrecked Chinese officer incident seems to have rather the character of a "cultural accident", comparable to the earlier arrival of the adventurer Wen about A.D. 815. Both cases seem to afford good examples of the principle that the more advantageous appears to be an innovation the fewer need its introducers be.

Very likely, in view of the comparative rarity of the opportunities, it was this same wrecked Chinese officer who also introduced the ballistas to the Chams. In both cases the Chams were very ready to accept the innovation, but owing to local circumstances it was only the ballistas that they were able to adopt. This shows that the Chams, and the Khmers, too, while there could be

¹ G. Maspero, op. cit., pp. 168 f.

no question of accepting Chinese ideas on war as a whole since these conflicted with the religious basis of the Indianized cultural pattern, were not above accepting any individual traits of material culture that offered an improvement. Finally, the Cham king's failure to obtain horses from China affords a confirmation of my earlier conclusion that neither Champa nor Cambodia had any real cavalry division of the army. What few horses they had were used as mounts for officers and probably also to provide small troops to act as scouts.

As in ancient India, the actual fighting must have largely centred round the single combats of the chiefs, the mass only lending their weight and taking advantage of any definite turn in the tide of battle. Certainly the inscriptions give such details as they do only of the feats of heroism of leaders. It is the same on the Bayon reliefs where the downfall of a chief is often indicated by broken parasol shaft or emblem. However, it must be added that the reliefs depict the common soldier as prancing into battle with apparent eagerness and as fighting with great spirit in the mêlée. In hand to hand fighting the Khmer footmen seem often to have discarded or lost their shields and they then sometimes use their free hand to grasp an antagonist by hair or arm. Chinese accounts say that the Cham soldiers fought in parties of five, whose members mutually helped one another; if one fled the other four were liable to be punished with death.¹

An inscription of Udayādityavarman II² speaks of the pleasure that this king derived from breaking an enemy's bones in single combat. And it was after a single combat with the former king Dharaṇīdravarman I that Sūryavarman II obtained the throne in A.D. 1118. The battle lasted all day and developed on the fiercest lines,

¹ G. Maspero, op. cit., p. 28.

² Inscr. of Prasat Khna, A.D. 1060, xxxix, xli, trans. G. Coëdes, *Inscr. du Cambodge*, i, p. 211.

judging from the terms in which it is described in an inscription : " Unleashing on the earth of combats the ocean of his armies, he delivered a terrible attack ; bounding on the head of the enemy king's elephant, he killed it, just as Garuḍa alighting on a mountain peak kills a serpent." ¹ And how often in inscriptions are Khmer kings represented as striking with their sword a shower of pearls from the frontal bosses of enemy elephants which are said to be decorated with them.²

On the reliefs of the Bayon, Cham leaders, and their escort are seen to bend and raise their joined palms in token of submission.³ Some men who appear to be prisoners sit in humble posture while two warriors or slaves hold up two heads of conquered enemies for the king to see.⁴ What fate awaited the defeated and the captives ?

The Khmer king Rājendravarman, at any rate, claimed to treat conquered enemies with the utmost magnanimity : " After having beaten in battle a proud enemy king, he treated the king's family with kindness, like the lion who has rent the king of elephants . . . " ⁵ ; " Holding the sword in his hand, but compassionate to the unfortunate, he had pity on the enemy hero that he had vanquished . . . he released numerous enemy heroes he had captured alive in the battle." ⁶

It was no doubt in the hope of receiving such generous treatment that, on the reliefs of Banteay Chmar, the following activities, on the part of the recently vanquished, are discernible : " To the conquering king they

¹ Inscr. of Ban Th'at, trans. L. Finot, *BEFEO*, vol. xii, pt. 2, p. 27.

² Inscr. of Prè Rup, lxxviii, loc. cit., p. 116; Inscr. of Prasat Komphu's, xviii, loc. cit., p. 176; Inscr. of Piasat Tor, Jayavarman VII, xv, loc. cit., p. 241.

³ *Le Bayon d'Angkor Thom* (Mission Dufour), Int. gal., face W, wing S. 60.

⁴ *Ibid.*, Ext. gal., face W. wing S. 51.

⁵ Inscr. of Mébon, cxxii, loc. cit.

⁶ Inscr. of Prè Rup, lxxxv, xci, loc. cit., pp. 117 f.

bring offerings of all kinds and animals such as a crocodile, its feet tied on its back, its nose bound round with ropes, some buffaloes, a bear, an elephant, some snakes, a beast with tied feet, covered with scales [pangolin], a pig, two muzzled tigers.”¹ Such offerings might save the donors’ lives. But we cannot say to what extent good treatment was assured : on the same temple reliefs women prisoners are seen led by a cord round their necks, while three men are shut up in a cage.

As to the pay or rewards of the Khmer soldiers, we know little beyond the statement of Rājendravarman that he distributed enemy goods according to merit.² About the pay of the Cham soldiers we are better informed from Chinese sources : “The pay consisted of subsidies in kind and they were exempt from tax. The ordinary soldiers received two bushels of rice a month and three to five winter and summer garments.”³

In a pitched battle, once some important leaders had been slain or had run away, the defeated side must usually have fled to the sheltering jungle, which was seldom far away. “These lions which are the routed enemy kings, and who have escaped from the massacre, casting away their arms even in full battle, turned about and fled to the forest, become feeble gazelles frightened by the king of wild elephants.”⁴ Then it was time for the drums to be beaten with renewed intensity, this time announcing the hour of victory. “His drum which, filling space with its rumbling and having for waves the joy of its noise, has resounded to proclaim on high his victory, and it resounds again to-day, imitating in a way the movement of the ocean.”⁵

When all was over we know that it was the custom

¹ Groslier, op. cit., p. 87.

² Inscr. of Mébon, cxxiii, loc. cit.

³ G. Maspero, op. cit., p. 28.

⁴ Inscr. of Prè Rup, xcii, loc. cit., p. 118.

⁵ Inscr. of Prè Rup, xcvi, loc. cit., p. 119.

for the conqueror, be he Cham¹ or Khmer,² to set up pillars to commemorate the victory. This seems to have been, in the case of the Chams, in addition to a *linga* they also erected, and each soldier brought a stone to be used in the construction. The practice seems allied to the custom that was observed up to the tenth century in the Tamil and Kanarese country of setting up memorial stones to fallen heroes, which sometimes became objects of worship.³ They were perhaps regarded as a kind of "substitute body" and if so the custom would be deep-rooted in pre-Hindu beliefs.

Both Chams and Khmers possessed navies; and unlike what is the case with regard to ancient India, we are in a position to form a fairly clear picture as to the character of their naval warfare. The Chams often employed fleets of more than a hundred vessels. Besides barges they also used some junks in coastal fighting with the Chinese.⁴ But in the naval battles between Chams and Khmers, with which we shall here be mainly concerned, the vessels were exclusively barges propelled by rowers. Such fleets generally operated in support of land armies. Even though the Chams, unlike other Indochinese peoples, were probably seafarers, they could not venture far from a shore held by friendly forces, because of the need, which restricted the range of all ancient naval warfare, of frequently replenishing fresh water supplies. That is why the eighth century depredations of the Javanese on Cambodia and on the Cham coast, unsupported by armies, could never have been more than raids of short duration and relatively ineffective character.

Since there are practically no references to naval fighting in the inscriptions, our main source of informa-

¹ Inscr. of Po Klaun Garai, Nos. 52-4, trans. R. C. Majumdar, op. cit., pp. 147-151.

² Inscr. of Ta Prohm, xiii, loc. cit.

³ K. A. Nilakanta Sastri, *The Colas*, vol. i, p. 87.

⁴ G. Maspero, op. cit., p. 28.

tion, and it is an excellent one, is the bas-reliefs of Bantéay Chmar and the Bayon. These graphically illustrate the naval battle which resulted in the liberation of the Khmers from the Cham invasion of A.D. 1177. The absence of marine forms amongst the fish, turtles, crocodiles, etc., swimming around the craft shows that the battle was fought in a river.

The war barges have been studied by Groslier¹ and by Paris.² While the reader may refer to these authors for the technical details which are outside the scope of our present interest, I shall note here the conclusions to which the last-named comes as regards the origin of this type of vessel. Furthermore, both authors call attention to many facts which concern naval warfare.

According to Paris, the war barges have nothing in common as regards shape to the later boats of China or to any Indian craft, but there is a similarity to ancient Han types and to the barges of Burma, Siam, and Indonesia. The figure-heads, in the shape of monster heads, like those of the dragon boats of Annam, are close to those on the Dong-So'n bronze drums. But basically the war barges of the reliefs are derived from the Malayo-Polynesian type which, in the Archipelago, became fitted with outriggers, adapted for ocean voyages. The vessels are huge dug-outs, as was observed by Tcheou Ta-kouan. On the basis of twenty-three rowers to a side, Paris calculated an average length for a barge of 27 metres.³ To this description I have one point to add: when we speak of the barges of Burma, it is to be understood that the Burmans derived them from the Môns, the earlier inhabitants of the country. It is doubtless because of that, as I have pointed out elsewhere,⁴ that the Burmese royal barges have the

¹ G. Groslier, *op. cit.*, chap. x.

² P. Paris, "Les Bateaux des Bas-Reliefs Khmers," *BEFEO*, vol. xli, pp. 385-381.

³ *Ibid.*, p. 355.

⁴ H. G. Quaritch Wales, *Siamese State Ceremonies*, p. 114.

hanisa figure-head, this being the most popular Môn emblem.

Let us consider first the representation of the naval battle on the Bantéay Chmar reliefs. In pl. xliv of Paris' article, two Cham and two Khmer barges are seen in each of the two registers. The leading boats are meeting head on and the Khmer soldiers are starting to board the vessels of their enemies. The Khmer rowers are bareheaded, whereas those of the Chams wear the flower-like headdress. All row facing to the rear, i.e. in the European or Indian way, which is contrary to that of the Chinese. They are protected by long lattice shields of rattan, through holes in the base of which they thrust their oars. The only exception is the second Khmer barge of the upper register, the barge of the king or admiral. This has a taller figure-head and the men face forward and paddle, instead of row, their craft. The chief, portrayed as of giant size, stands on a dais in the middle of the boat and shoots an arrow. Paris aptly compares him to the archer shown on the Dong-So'n drums. In standing up thus bravely in the open, the courage or invulnerability of the commander is intended to be shown. Moreover, in this the paddlers are all held to share, for they are the only boatmen unprotected by a lattice shield. However, it is to be noted that the Khmer chief, alone of all the combatants, wears a cuirass. In the middle of the barge below that of the Khmer leader stand three personages with chignons and raised hands. They appear to be performing some religious rite or supplication for the success of the fight.

Filling both the leading Khmer barges and in the prows of the rear ones are the warriors. Excepting the officers, they are all bareheaded and clothed only in belts. This is quite unlike their opponents who, besides their distinctive headdresses, wear *sampots* and short-sleeved tunics. The Khmer soldiers stand with poised

spears behind the seated rowers, and those in the bows of the leading craft are actually boarding the Cham vessels. In the leading Cham vessel of the upper register, while the rowers are still dutifully propelling their craft forward, their chief, a tall figure in the centre of the boat, has turned to flee. In the other three Cham barges, however, the rowers have all turned round in their seats and are evidently backing astern. From the rear two craft many dead or wounded men are falling into the water, there to be eagerly received by the crocodiles.

On the Bayon the same battle is illustrated ; but here there are three registers and more vessels are shown. The Khmers are attacking the Chams from two directions, and we notice in the top register that the Cham chief is turning half round to meet his unexpected attackers from the rear. Presumably the Khmers are here definitely indulging in realistic tactics. Both sides are armed with long spears and shields, except that one of the rearward Khmer barges is filled with archers. This suggests that the bow was used in naval warfare before the close combat began. In the middle register a Cham vessel, which is being assailed from two directions, is represented as sinking by the head. At the same time the Khmers are still boarding her ; and most of the Cham crew and warriors are in the water, some of them having jumped in voluntarily in an effort to escape. To the right of this sinking barge a Cham and a Khmer vessel are alongside one another, and it is impossible to tell which warriors are doing the boarding. Most interesting, in the lower register we can see clearly how the grappling is effected : two men have thrown grappling irons from the prow of the Khmer barge, which have taken fast hold of the Cham boat's stern. While these men haul on the rattans the first of the Khmer soldiers springs aboard the enemy craft. Meanwhile, a Khmer officer directs operations from beneath his parasol in the centre of the boat.

Paris limits his comments on the fighting to a description of what he sees ; and what Groslier has to say about Khmer naval tactics is largely incorrect. To appraise the data properly a wider comparative standpoint is necessary. One must bear in mind that "two systems of naval warfare, broadly speaking, existed in ancient history : (1) the system which may be defined as land warfare projected on the sea by means of ships ; (2) the system which depended for success on adroit handling of ships, on tactics, on manœuvres, and which partook somewhat of the character of sea warfare as the term is understood to-day."¹ The first and older method, called by Greek and Roman writers "the ancient system" and never quite given up in the classical West, was largely a matter of close in-fighting by crews of ships grappled together. Thucydides thus describes such fighting, in the battle of Sybota between the Corinthians and the Corcyreans in 432 B.C.

"The decks of both fleets were crowded with heavy infantry, with archers and javelin men ; for their naval arrangements were still of the old clumsy sort. The engagement . . . had almost the appearance of a battle on land. When two ships once charged one another it was hardly possible to part company, for the throng of vessels was dense, and the hopes of victory lay chiefly in the heavy-armed, who maintained a steady fight upon the decks, the ships meanwhile remaining motionless. There were no attempts to break the enemy's line. Brute force and rage made up for want of tactics. Everywhere the battle was a scene of tumult and confusion."²

Quite different was the newer method by which the Athenians gained control of the eastern Mediterranean in the fifth century B.C. Here the ram, preferably directed against the middle of the opposing ship, was

¹ A. M. Shepard, *Sea Power in Ancient History*, London, 1925, p. 26.

² Thucydides, i, 48-55, as quoted in A. M. Shepard, op. cit., p. 27.

the pre-eminent weapon ; and it brought into being a system of tactics depending on speed and skill in manœuvring. "With the perfection of the use of the ram, the weapons and methods of land warfare were largely discarded from the warship. The galley was lightened and her speed increased by decreasing her complement of heavily armed soldiers or marines on board. Instead of being used as a transport for conveying crowds of warriors alongside of hostile vessels similarly manned, where they fought it out soldier-wise, the warship herself now became 'a missile to be launched with sudden violence against the vulnerable parts of the enemy's vessel and again suddenly withdrawn by means of dexterous rowing.' One strong, well-placed blow of the ram was generally sufficient to send the rammed vessel to the bottom. Though the manœuvres employed in the warfare of ramming were many and varied, the object sought was generally effected in one of two ways : (1) the attacking vessel by superior speed or manœuvring brought her ram crashing into the enemy's flank without any preliminary blow or contact ; (2) by a swift rush alongside, the assailant, suddenly drawing in her oars on one side, swept away the enemy's oars with her sharp bow, sheered off, and then returning as her foe lay paralysed and helpless, delivered the *coup de grâce*."¹

No very close examination of the Khmer bas-reliefs is required to ascertain that it is exclusively the older method of warfare that is being employed by the Khmers and Chams. Its antiquity seems to be as great as is that of the type of their ships. Everywhere we see the barges attacking end on, with a view to grappling and fighting it out after boarding. The only case of a barge sinking is obviously the result of a chance collision, which is not very surprising since the Cham vessel has been simultaneously approached by Khmer barges at bow and stern. This deduction is confirmed by the fact that

¹ A. M. Shepard, op. cit., pp. 27 f.

while the Cham vessel is going down, Khmer soldiers are caught in the act of boarding her.

Yet Groslier evidently had confused ideas on naval tactics in his mind when he wrote : "The big war barges usually have in front two great recurved blades. I am disposed to regard them not as pure ornaments which, exposed in such a position, would have been broken at each boarding, but on the contrary, veritable spurs of sharp metal."¹

The projections, curving upwards in an impractical manner, are quite unlike the ram of ancient and medieval naval warfare, which was a more substantial instrument, at or near the waterline. They could not have been used for effective ramming. But this does not mean that they were pure ornament. As tusks they were an essential part of the *makara* figure-head, and had a function either magical or to inspire fear into the enemy. Nor need we conclude that they would so easily have been broken off in battle. In the boarding the boats usually came together relatively gently, the men hauling on the grappling lines, as we have seen on the reliefs.

The war barges were on occasion used in other ways. Paris mentions that a relief (unpublished) of Bantcay Chmar shows an attack on a Khmer fortress by the Cham fleet, the Khmer defenders within the city being indicated as numerous and well protected behind their rectangular shields.

Sometimes war barges were used as troop transports pure and simple. On the Bayon² we see three Cham barges filled with soldiers approaching a landing place, from which the Khmer population appears to be fleeing. The rowers are bareheaded and may be a crew of Khmer prisoners. Paris calls attention³ to the horizontal trilobed standards of these Cham barges, remarking that

¹ G. Groslier, op. cit., p. 112.

² *Le Bayon d'Angkor Thom* (Mission Dufour), Ext. gal., face S, wing W, pl. 27.

³ Loc. cit., p. 347.

this definitely permits us to distinguish from these as being Khmer, the vertical standards often mixed up with them in the battle scenes.

Did Chams and Khmers ever use their fleets to blockade an enemy port? In the ancient warfare of the West, blockades were often tried but were seldom successful. This was partly because of the need to obtain supplies and water from a coast which was usually in the enemy's possession.¹ The Khmer inscription of Thnal Baray² says: "In an expedition he has, in order to conquer, broken in the open sea the thousands of fresh white ships, connected together by rattans, which extended on all sides." Barth supposed that the fresh and white referred to the sails, connected by rattans. Groslier, however, commenting on this,³ prefers to accept the text literally, believing the ships to have been connected by rattan ropes, and he inquires if it may not signify some kind of tactic. Since war barges had no sails, I think he may be right; and it may also be that the inscription refers to an attempted Cham blockade. Certainly in the Middle Ages of Europe "it seems to have been a very usual piece of tactics, in attacking as well as in awaiting attack, to connect a large number of galleys by hawsers, and sometimes also to link the oars together, so as to render it difficult for an enemy to break the line or run aboard".⁴ If it was a blockade and the Chams, as the inscription claims, were defeated, or simply gave up the effort, that would be quite in accord with the usual fate of blockading attempts in ancient history.

Our survey of Khmer and Cham warfare, based on direct evidence, is now ended. Some may feel that the sum of our knowledge thus arrived at is by no means

¹ A. M. Shepard, op. cit., pp. 36 f.

² Of Yaśovarman I, Barth and Bergaigne, op. cit., p. 492.

³ G. Groslier, op. cit., p. 88.

⁴ *The Book of Ser Marco Polo*, trans. Sir Henry Yule, second edition, vol. i, p. 36.

inconsiderable. Others may be disappointed and regret that so many aspects, especially in their more intimate details, must remain hidden from us. In the following chapters I shall hope to show that, at least in terms of probability, we may go a good way towards filling in many details of the picture.

CHAPTER VI

SIAM AND BURMA: THE PREPARATIONS

In a work on *ancient* South-east Asian warfare our interest in the traditional methods of war of the Burmans and Siamese, which largely remained in vogue until well into the nineteenth century, will mainly correspond to the extent to which they may be considered to preserve earlier usages. Have they, that is to say, for the earlier Môns and for the Burmans of Pagan on the one hand and for the Khmers on the other, a documentary value comparable to that of the present day Torajas and of the medieval Javanese ?¹

Concerning the early Môn warfare and that of the Burmans of the Pagan kingdom we have no direct knowledge, for the reason that they left no bas-reliefs illustrating the events of their own history, and Buddhism looks askance at the glorification of military prowess in inscriptions. We can only presume that, since the Môns were a very Indianized people, and since Anuruddha learnt a great deal from them and from Bengal, early Môn and Burmese warfare adhered closely to the Indian model.

Anuruddha and the great kings of the Pagan dynasty could probably afford to practise idealistic warfare but that does not mean that leaders of less power did not fall back on realistic methods in times of stress. Thus, we are told that the rebel "Nga Ramankan thought: 'Kyanzittha is skilful in war. Victory will not be easy save by crooked ways and stratagems.' Thus laying it

¹ In estimating such documentary value we shall make due allowance for cultural loss, misinterpretation, and other forms of change, while recognizing the considerable force of the conserving tendency in such secondary Indianized civilizations.

to heart, with strips of bamboo he fashioned false arrays of elephants and horses, and placed them in swampy and muddy places, and set howdahs thereon, and framed also human figures to hold shields of every kind, round and embossed, oblong and convex.”¹ This stratagem, which in the means employed is rather reminiscent of the ruse made use of by the Chinese against the Cham elephants (p. 28), was successful. The royal elephant of King Sawlu, who was with Kyanzittha’s army, “fell into the mud and stuck,” whereupon the whole army fled.

Generally speaking, for any knowledge of the earlier Môn and Burmese warfare, and for any hope of filling in some of the probable details of the Khmer picture, we are dependent on what we may be able to gather from the Siamese and Burmese evidence. To form a preliminary idea of the probable value of this evidence we must first glance at the circumstances of history.

So far as the Burmans are concerned, we have to bear in mind what a terrible disaster befell both them and their culture with the capture of the capital city of Pagan by the Mongols in A.D. 1287. The Shans, who swarmed down from the north and for two and a half centuries ruled the country as vassals of the Chinese emperor, did not unify it and absorb the civilization of Pagan as their cousins in Siam unified that country and learnt from its displaced rulers. The higher things in life deteriorated indeed with the downfall of Pagan. “Instead of the great dynasty with the refining influence of the palace, we have half a dozen squabbling little courts, all of them, even when not positively barbarous, busily engaged in degrading the country with civil war.”² And what sort of war was it? The Burmese and Môn chronicles leave no doubt that it was limited

¹ *The Glass Palace Chronicle of the Kings of Burma*, trans. by Pe Maung Tin and G. H. Luce, Oxford, 1923, p.101.

² G. E. Harvey, *History of Burma*, London, 1925, p. 78.

to the most treacherous and usually least effective aspects of realistic warfare, in which all energy was expended in thinking out new forms of deceit, but without any boldness in execution or resolute leadership.¹

In A.D. 1531 the Shan nightmare came to an end with the emergence of Tabinshwehti, a Burman of Toungoo, who reunited the kingdom. Together with the usual base sort of artifice, such as he began by successfully using against Pegu,² he showed a new spirit of determination in action, and in this he was greatly helped by his foster brother Bayinnaung. The latter first showed his mettle in attacking Prome. "Bayinnaung's scouts stumbled across a greatly superior Talaing [Môn] force on the other side of a stream. Other commanders would have promptly retreated, but Bayinnaung had already discovered, as every good leader discovers in a third-rate environment, that numbers do not matter, it is spirit that counts."³

In 1551 Bayinnaung became king. He had to begin by killing a usurper in single combat and sacking Pegu. After that he conquered the Shan states and then, with the vastly increased manpower at his disposal, he set out to invade Siam, on which country his predecessor had already made an indecisive attack in 1549. He captured Ayuth'ya in 1564 and again, after it had rebelled, in 1569. But in neither case was the Siamese capital taken by storm : it surrendered the first time out of terror of the noise made by the Burmese king's Portuguese gunners, and the second time it fell through treachery. With a new kingdom to establish and frequent internal revolts to quell, Bayinnaung could not afford to

¹ For examples see Harvey, op. cit., p. 83 ; also *Cāmadavivāhśa*, chap. 18, written at Chiengmai in early fifteenth century, and trans. by G. Coedès, BEFEO, vol. xxv. The legendary Môn chronicle *Rājādhirāja* is full of episodes of treacherous warfare of this sort.

² By arranging for the capture of a forged letter which pretended to implicate the best two Peguan commanders in treason.

³ G. E. Harvey, op. cit., p. 154.

take the risk of parading as an idealistic *kṣatriya*, for the sake of appearances. But with personal courage, determination, and the most severe control of his men, he gave realistic warfare its full potentialities, such as had not previously been known in this region.

We must now trace the historical background of Siamese military development up to this point. The T'ai were probably no more than marginal to either Indian or Chinese civilization when they entered the Indochinese peninsula. On the Angkor Wat reliefs, showing the royal procession, we see the T'ai as a contingent of vassal troops, the Syām Kuk, wearing a bizarre garb, armed with a curious type of spear, except for the leader on his elephant who has a bow. All are lacking the helmet and cuirass which was still worn by most of the Khmer soldiers on such ceremonial occasions. But, despite their peculiarities, we cannot doubt that the Siamese were already undergoing Khmer acculturation, at least as regards their military training, in the middle of the twelfth century. From what we have seen in the last chapter it would seem that it was mostly idealistic warfare that they were learning. There is reason to believe that it was by the direct methods of frontal attack that, about A.D. 1220, the Siamese captured Sukhot'ai from its Khmer governor, and founded the first independent kingdom of Siam.

The second Siamese kingdom, with its capital at Auyth'ya, had grown more powerful. Its founder captured Angkor in A.D. 1352, for the Khmer kingdom had by this time become weak and exhausted. In 1398 the Siamese took Angkor again and in 1431 they captured it for a third and final time. It was this last occasion that led to most important cultural acquisitions for the Siamese. For though they had taken their Buddhism, and some of their legal institutions, from Burma and Ceylon, it was to the dying Khmer empire, with its vast imperial experience and time-honoured military lore,

that the Siamese turned for the knowledge that would enable them to govern and hold their now far-flung dominions. Large numbers of captive Khmer Brahmans and other advisers were brought to Ayuth'ya ; and King Trailok, ascending the throne in 1448 at the early age of seventeen, was very much in their hands. He divided the population into civil and military divisions on the Khmer model and did much to increase the strength of the army. But it was not until the reign of his successor, Rāmādhipati, who came to the throne in 1491, that a treatise on war was issued in 1518.¹

The Siamese had now inherited even the most closely guarded secrets of the Khmer empire. At least in accordance with their understanding of these they were now able to complete the training of their armed forces on Khmer lines, a process which had been begun at a lower level 250 years earlier. They could not have known that this knowledge was to avail them nothing. They did not suspect that after a hundred years of peace and plenty they were in their turn to fall an easy victim, as we have seen, to a power using a far more deadly weapon than they had used against the Khmers, a combination of skilled leadership and realistic methods of warfare.

Siam has been fortunate in that on more than one occasion when Fate seemed to have abandoned her a national hero arose who proved equal to the task of re-establishing her independence. After Bayinnaung captured Ayuth'ya for the first time in 1564, he took back to Burma the young Prince Naresuen, popularly and appropriately known as Siam's Black Prince, as a hostage for his country's vassalage. Allowed to return to Siam in 1571, at the age of sixteen, he was appointed Crown Prince and Governor of P'isnulok. In 1584, a few

¹ *Annals of Ayuth'ya* (Royal Sign Manual Edition), in Siamese (hereafter abbreviated *AA*), Bangkok, 1918, vol. i, p. 18; H. G. Quaritch Wales, *Ancient Siamese Government and Administration*, London, 1934, p. 187.

years after the death of Bayinnaung, he felt strong enough to renounce Siam's allegiance to Burma. Then, both before and after he became king of Siam in 1590, in a series of brilliant campaigns, he completely turned the tables on the Burmans. We shall refer to some of his exploits later. Here it is sufficient to note that, while undoubtedly it was only his great personal courage and talent that enabled him to profit by his experience, it was during the six years that he spent as a hostage at the Burmese court, at a very impressionable age, that he learnt Burmese methods of warfare and was inspired to emulate the deeds of Bayinnaung. His tactics were of the same type as those of Bayinnaung, carried out with even more conspicuous courage and ability.

It is against the background of these historical facts that we have, in the first place, to judge the evidential value of our principal source of information on ancient Siamese warfare, the *Tāmra P'ic'ai Sōngk'ram*, or *Treatise on the Art of War*. It is known mainly from two manuscripts (each consisting of several folding volumes) in the Bangkok National Library. The text in both is the same, except that the one which Luang Boribal Buribhand informs me is dated B.E. 2886 (A.D. 1793) is a little more complete and also includes some astrological tables and plans of battle arrays which are lacking in the other. The *Treatise*, as I shall in future call it, was printed and published, but without the astrological tables and plans of battle arrays, by the Royal Institute in 1925. The reason for omitting this latter and very important part seems to have been that it was not, of course, in verse, like the rest of the work, and the primary reason for publishing the *Treatise* was because of its interest to students of the different kinds of Siamese prosody. But it is not to be regarded as a poem. It is written in verse because, except for laws and chronicles, verse was the favourite form of Siamese literary composition.

When he had first referred to this *Treatise*,¹ Prince Damrong gave the impression that he considered it could not be the same work as the one issued in the reign of king Rāmādhipati II and which was of Khmer origin. But when he wrote his preface to the published edition, eleven years later, he had considerably modified his opinion. I believe that the views he there expressed are substantially correct, being in accordance with what we know of the way in which culture change usually takes place. According to these later views of Prince Damrong, the original work of Rāmādhipati II had formed the basis which had been then modified or added to for the first time by King Naresuen. Subsequent modifications were all in the same direction, that of reducing ceremonial and ritual content, and adding to the stratagems and other practical considerations that formed the substance of the realistic warfare which continued to be employed in Siam after its first introduction by Naresuen. In giving this as his opinion Prince Damrong was speaking more particularly of the portion of the work which he was publishing, and I am prepared to believe that most of this dates from no earlier than Naresuen's reign and was largely derived from Burma. However, the astrological material was probably common to all those armies of South-east Asia where Brahmins were employed, even though in some cases it is difficult to point to the origins in India of some of the usages.

Nevertheless, because king Naresuen adopted so much that he had learnt in Burma, it is not to be supposed that he wished to introduce a total Burmese pattern, even in warfare, or that the Siamese would have permanently accepted it. How little they liked Burmese ideas can be judged from the scant influence Burmese architecture had on Siamese. In introducing Burmese

¹ Prince Damrong, *Commentary on the Annals of Ayutth'ya*, (in Siamese) Bangkok, 1914, p. 502.

methods of warfare Naresuen was taking what Siam had to have if she was to survive; and this would not have included elements of a ritual or ceremonial character which she already had. I hope to show conclusive evidence for this in the next chapter.

In 1825, at the beginning of the reign of Rāma III, it was decided to produce a new edition of the *Treatise*, owing to the confusion and neglect that had overtaken this branch of learning since Bangkok had become capital. Prince Damrong published the contemporary edict dealing with the matter. It is clear from the instructions there given to those who were to carry out the revision and rewriting, based on what had survived the destruction of Ayuth'ya in 1767, that special attention was to be given to correcting errors in ritual and prognostications. It seems to have been felt that it was largely the neglect of such matters in the latter part of the Ayuth'ya period that had led to the fall of the old capital.

Prince Damrong states that no complete copies of the new edition are known to have survived. But in an appendix to his *Reisen in Siam* (Jena, 1867), pp. 480-5, Adolf Bastian gives a good deal of information which, since it differs in part from the published *Treatise*, is almost certainly derived from the then extant new edition. Careful examination of it shows that this material must be regarded in the nature of a commentary, not of equal authority to the *Treatise* of 1793, which was probably written by Brahmans who had personal knowledge of the Ayuth'ya traditions. On the other hand, the pandits responsible for the new edition were endeavouring to correct and interpret what at that time was no longer clearly understood. Sometimes their efforts are helpful, sometimes the reverse.

After the *Treatise* the most important source is the *Annals of Ayuth'ya*, to which reference has already been made. But it is almost only with regard to the campaigns

of Naresuen that they go into sufficient detail to be useful in the present study.¹

Corresponding to them from the Burmese point of view, but seldom giving details on war of much cultural value, is the *Glass Palace Chronicle*, more especially the later part which is so largely concerned with the 800 years of constant friction with Siam.² Some of the chronicles of Northern Siam, the Môn chronicle *Rājādhīrāja* (referring to thirteenth to fifteenth century events),³ as well as the Siamese and Cambodian law texts, contain facts of interest which will be referred to as we proceed. The Cambodian law texts, it will be understood, are often nearly the same as the Siamese, since Cambodia was frequently vassal to Siam and underwent extreme Siamese acculturation.

As so much was destroyed in the sack of Ayuth'ya in 1767 it is not surprising that there is only one work of Siamese literature proper that I consider to be of use in this inquiry. It is not as history that I consider it reliable for, indeed, it is only a historical novel (in verse), based on events that took place in the reign of Rāmādhipati II (1491-1529), but for its references to old Siamese customs and its "atmosphere" of old Siam. *The Story of Khun Chang Khun Phan* is indeed nothing

¹ The parts referring to the wars between Siam and Burma have been translated into English by Nai Thien (Phra Phraison Salarak) in *JBRs*, xxv, pt. 2, and xxviii, pt. 2. But the translator misunderstands or omits many interesting references to ritual and divination, which is not surprising since the terms are often archaic, and Siamese is not his native language. Less excusable, in a modern translator, is his habit of interpolating remarks of his own into the text, for which the reader must be constantly on guard. Nevertheless, those who wish to know more of the ordinary details of Burmo-Siamese fighting, and cannot consult the original, will find this translation useful.

² The parts of interest have been translated into English by Nai Thien in *JSS*, vols. v, viii, and xi, with the title "Burmese invasions of Siam from the *Hmannan Yazawin Dawgyi*". One suspects the translation is far from literal and the translator certainly interpolates many comments of his own.

³ First composed in the sixteenth century, a Siamese version of *Rājādhīrāja* was made in A.D. 1784, of which there have been several printed editions.

if it is not a purely Siamese composition, uninfluenced by Indian classics.¹

While it might be possible, on some slight internal evidence, to argue that the kernel of the story goes back even before the foundation of Ayuth'ya, the late Prince Bidya, a leading authority, had the following opinion as to dating : " If you asked me the age of the book as we have it to-day, I would say that it has none, for it is made up largely of interpolations introduced at different times with little, if any, of the original text left." ² Consequently, I would repeat that it is the truly Siamese character of the book that gives us its interest. The hero of the story Khun Phan (Khun Chang being a comparatively minor character though probably the older of the two) was, amongst other things, a military man of some distinction. The way in which he equips himself for the profession of arms, which his father ³ had followed before him, and the description given in the poem of an expedition he leads against an invading force sent by the ruler of Chiengmai to lay claim to a town in a remote part of the Ayuth'ya dominions, provide us with some intimate details on Siamese warlike usages.

I now propose to say a little about the type of literature that we cannot use as source material. It perhaps goes without saying that this includes all seemingly Burmese, Siamese, or Cambodian fables and legends, whose origin in *Jātakas* or other Indian stories has merely been more or less disguised. This applies also to their details, which even though often much acclimatized contain much of the miraculous and little that is dependable.

A work that is at first sight likely to look tempting is

¹ Printed in three large volumes by the National Library in 1917 (in Siamese), with preface by Prince Damrong (and formerly by Smith's Press in 1872). An outline of this remarkable story is given in Prince Bidya's lecture on it, *JSS*, vol. xxxiii, pt. i, 1941.

² Prince Bidya, loc. cit., p. 9.

³ The father was beheaded by the king's order for a relatively minor error, while Khun Phan was still a child.

the *Evidence of Khun Luang Ha Wat*.¹ The author was one of the Siamese taken captive to Ava, after Ayuth'ya fell in 1767. According to a then prevailing custom he had been called upon to dictate an account of his country, including her history, which would enable the victors to know more of the people they had conquered. Unfortunately, the informant, in his account of the kings of Ayuth'ya, had only his memory to consult. In the circumstances it is perhaps remarkable that he remembered as well as he did. It is nevertheless regrettable that he sadly confused what he had presumably once read in the *AA* with what he remembered of the Indian Epics. But we cannot be certain whether he was deliberately trying to impress his Burmese hearers with the greatness of a Siam of better days, or whether he really believed that ultra-Epic conditions prevailed in Siam up to a hundred years before he wrote, although he is under no such delusions when describing the fall of Ayuth'ya at which he was taken prisoner. Thus, of Naresuen's army we are told that, after the elephants and the cavalry "next came soldiers who rode in chariots; and divers kinds there were, namely, chariots for assault and chariots for defence, chariots with men carrying swords and spears."² And later, in describing an attack by King Narai on Chiengmai (A.D. 1661), the author describes the battle with the Lao forces in the following revealing terms: "Elephants engaged elephants, whilst the riders hurriedly fired their guns; gunners fought gunners with guns, filling the whole forest with smoke; spearmen met spearmen with spears; swordsmen struck at swordsmen; lancers

¹ Printed in 1916 by the National Library and partly translated into English by Prince Vivadhanajaya, *JSS*, vols. xxviii and xxix, it should not be confused with a work formerly referred to under that title by King Chulalongkorn (and by myself in *Siamese State Ceremonies*) and which, though largely similar to the first mentioned, includes valuable factual appendices. It is now more correctly known as the *Evidence of the People of Ayuth'ya*. Printed in 1925, it has not been translated.

² *JSS*, vol. xxviii, p. 154.

engaged lancers in true and proper style; long-swordsmen fought long-swordsmen, each side displaying its skill; those armed with clubs fell upon one another with clubs; those who carried a short sword and a shield engaged those similarly armed; archers shot at archers and bowmen at bowmen; those with daggers struck at those with daggers, and those with sabres cut at those with sabres."¹ Though the author certainly refers to many genuine Siamese usages, it will be better to take our information concerning these from works of a more generally reliable character.

Two poetical works by the Burmese judge and poet, Letwethondara, written towards the end of the eighteenth century, purport to describe traditional Burmese strategy. Their spurious character will be more readily demonstrated when we come to consider strategy and tactics in the next chapter.

The start of the long series of wars between Siam and Burma was simply due to the Burmese king's desire to add Siam to his dominions once the Burmese kingdom had been reunited after the long period of Shan misrule. The refusal of the Siamese to give up a white elephant in 1563 was but an excuse that has become famous in history. Raids and counter raids, with the carrying off of border population, provided continuing incidents which every now and then exploded in a full-scale invasion or counter invasion. Cambodia took the opportunity to throw off the yoke and attack Siam whenever the latter was in difficulties. The Lao states, especially Chiengmai, were a bone of contention between Siam and Burma until Siam finally absorbed them in the nineteenth century. For the events of such wars and their effects the reader can refer to the standard histories; here we are only concerned with the actual character of the warfare.

¹ *JSS*, vol. xxix, p. 129.

Campaigns were undertaken almost only in the dry season, when tracks were dry and granaries full. When a campaign was contemplated it was, of course, necessary to begin by mobilizing the forces. As I have dealt in detail in a previous work¹ with the ancient Siamese army organization and method of levying troops, it will be unnecessary for me to go into the subject here; indeed, it would be difficult to consider it apart from the structure of society as a whole. But it may be useful to take this opportunity to remind ourselves that the considerable changes which I traced in that work, between the army organization of the fifteenth and the eighteenth centuries, should warn us that we cannot expect any part of the Siamese art of war to adhere in detail, but only in general, to the model they originally adopted from the Khmers.² We may, however, note here that the system of levying troops indicated at the beginning of the *Treatise* is in accord with that which I have shown was derived from the Khmers. The Burmese system was less complex. This was owing to the simpler Burmese social organization, but the information we have as to it is very late.³

The rank and file do not appear to have been mobilized at all willingly, either in Burma⁴ or in Siam: "Bring the men in by force" was the order to the officials told to collect an army for Khun Phan's expedition against Chiengmai, "or force the lords to take the place of their retainers who are in hiding. Take money in lieu of service from those who are ill, bring in elephants and horses, distribute guns and stone balls, and all kinds of

¹ H. G. Quaritch Wales, *Ancient Siamese Government and Administration*, London, 1934, chap. vi.

² Any more than we expected the customs of the Torajas to preserve primitive forms unaltered.

³ *Gazetteer of Upper Burma and the Shan States*, pt. i, vol. ii, Rangoon, 1900, p. 499. An article on "The Burmese Army", by R. R. Langham-Carter, *JBRs*, 1937, vol. 27, pt. iii, deals only, and in a general manner, with the semi-Westernized Burmese army of the late nineteenth century.

⁴ J. Crawfurd, *Embassy to the Court of Ava*, London, 1834, vol. ii, p. 159.

warlike supplies.”¹ Meanwhile, at Chiengmai, “the officials called up the men, or brought in the wives and children of those they couldn’t find. Some beat and scolded the men to get them to serve. Others got together food, spears, swords and cannon, elephants, horses, oxen, and buffaloes and marshalled them in order.”² The same procedure was followed on another occasion when two high officials “were ordered to call up men and get together food, taking by force where any dispute arose, the officials in such cases to bring in wives and children too. So the civil and military divisions [both divisions of the population had to serve in time of war] were assembled in a crowd, and horses and elephants were brought together in a circle. Silken flags were distributed, spears and swords brought out into the middle of the field, together with an abundance of hats, both large and small”.³

As these extracts indicate, the government provided arms and equipment, and usually enough rice for the first few days’ rations. The provincial forces were independently mustered by the local governors. They were either required to act independently, especially if it was a case of repelling an enemy invasion, or else were ordered to join the main army at the capital.

We may now consider the religious preparations. I have elsewhere dealt with the Snāna, or lustration of arms which was formerly carried out twice a year in Siam.⁴ It was a review and general purification of the army, similar to that of the Hindu Nirājana.⁵ I am now inclined to believe that the ceremonies mentioned in the *AA* as being carried out prior to the launching of campaigns were of a somewhat different sort, more

¹ *KCKP*, vol. i, p. 179.

² *ibid.*, vol. i, p. 168.

³ *ibid.*, vol. ii, p. 122.

⁴ H. G. Quaritch Wales, *Siamese State Ceremonies*, p. 297.

⁵ For the Hindu ritual, which dates from Paurāṇic not Epic times (Hopkins, loc. cit., p. 194), see the Brhat-Saṁhitā of Varāhamihira, English trans., by H. Kern, *Verspreide Geschriften*, vol. i, pp. 296–8.

practically attuned to the needs of imminent fighting, and more revealing of the underlying spiritual concepts. They were probably the same as those rites prescribed in the *Treatise* (pp. 10 f.) as follows :—

“Build a victory *sāla* with parasols, flags, candles, and tapers. Bring 7-tiered offering trays to propitiate the *devas*, guardian spirits Su'a Müöng and T'ròng Müöng. Let the soldiers continually go and bid farewell to Su'a Müöng, before going forth to overcome the enemy. Then prepare the howdahs for the courageous elephants, the arms and horse equipment. Have worthy monks pray before a famous Buddha image, prepare lustral water, and draw the protective thread¹ around. Persevere in this for three days. When ready to go, pay homage to the king, take water to wash his feet, sprinkle all with it, and, when you have taken the oath of allegiance by drinking water in which the royal sword has been dipped, prostrate yourselves with bended head. Muster the elephants, horses, and weapons while tapers are brought for the *t'um khwān* rite,² and all are sprinkled with water that has been consecrated with Buddhist *mantras*. Put auspicious threads³ on the commanders' heads, and on every elephant and horse, saluting their feet. Then make offerings in favour of the dead, consider the omens and salute the ancestors. Let monks make salutation, ask blessings and recite powerful *mantras* each day.”

In the above passage propitiation of the *devas* is mentioned first, which is not surprising since the *Treatise* is obviously the didactic work of a Brahman *purohita* and opens with the invocation of Śiva and Viṣṇu. Indeed, we shall see later that the Siamese astrologers

¹ See H. G. Quaritch Wales, *Siamese State Ceremonies*, p. 73, n. 2.

² See G. E. Gerini, *Chūlakantamarigala*, Bangkok, 1895, pp. 72–85. As performed in the Tonsure ceremony, this rite is intended to confirm and fortify the candidate against fear, dangers, ill-luck, etc.

³ For the origin and means of consecration of such auspicious (*mōngk'ōi*) threads, see Gerini, op. cit., pp. 155 f.

still recognized the importance of bringing the military undertaking into association with the cosmic axis. But from the point of view of most of the participants in the campaign, Hinduism supplied a certain amount of ritual dressing while the Buddhist monks occupied themselves in reciting powerful *mantras* and taking other measures to avert evil, for it is only this magical aspect of popular Buddhism that can have a place in warlike preparations. Propitiation and supplication of Su'a Müöng and other animistic tutelary spirits therefore looms large. The position was somewhat similar in Burma, where the people turned to the *nats*, spirits of notables who had died violent deaths, for help in time of war or national danger. The object of the rites just described is definitely stated in *KCKP*¹ to be to assure the soldiers' bravery.

In the Chiangmai chronicles, again, particularly that of Suvaṇṇa Khamdēng and that of Mahāthera Fa Bōt,² there is much to say about city guardian spirits of various kinds. And both in Siam and Burma such animistic spirits, when a city was threatened, would go forth and do battle with the spirits of the enemy, or would lead an invading force astray.³ Anuruddha is said to have been unable to capture Thaton until he had first obtained the remains of a certain Indian who had acquired supernatural power through roasting and eating the body of a learned fakir and had subsequently been turned into a very formidable spirit guardian at the request of the king of Thaton.⁴

The reassurance derived from propitiating city tutelary spirits on the eve of war might need to be supplemented for each individual warrior by something more personal, as we found was the case with the Torajas. Such aids

¹ Vol. i, p. 200.

² Trans. C. Nottou, *Annales du Siam*, vol. i, Paris, 1926.

³ Tin and Luce, *Glass Palace Chronicle*, p. 174; *Cāmādevīvaṃsa*, chap. xiv, trans. G. Coedès, BEFEO, vol. xxv.

⁴ *Glass Palace Chronicle*, pp. 76-8.

varied from familiar spirits who would do battle on behalf of their master, to ordinary amulets of purely protective function. The former were perhaps not within the power of everyone to own, but Khun Phan mentions such a private spirit as being one of the three essentials of a commander of distinction, the others being a good horse and a charmed sword. To the latter we shall return later, and of the horse no more need be said since there is no indication that it had to be a demon one, like the horses of Anuruddha's generals,¹ and no particular difficulty was encountered in getting one. But Golden Boy (*Kūmara T'òng*) was a different matter.

The spirit of an unborn babe was needed, and this could only be obtained by re-animating the foetus of a woman who had died in childbirth. The usual method was to go to a graveyard and find the body of such a woman, and then ask for the spirit of the babe in order to rear it as a Golden Boy. This was the method followed by Khun Phan according to the earlier version of *KCKP*. I propose to give no wider currency here to the more dramatic but false story given in the Library Edition, which Prince Damrong in his preface² has rightly pointed out to be a modern interpolation. However, the actual process of re-animating the foetus is the same in both editions. As such we cannot doubt that it was in fact practised, for the details of its Brahmanical ritual closely correspond to those prescribed for making love philtres, which have been described from independent sources.³ Both the similarity to Batak practices mentioned above (p. 44) and to certain Indian black magic recorded by Crooke (op. cit. pp. 422 f.), point to an Indian origin here too.

The equipment required by Khun Phan included three

¹ *Glass Palace Chronicle*, pp. 69, 77.

² *KCKP*, vol. ii, p. i.

³ E. H. Giles, "About a Love Philtre," *JSS*, vol. xxx, pp. 25-8.

candles, a tinder box, a protective thread, and some metal *yantras* (metal talismans inscribed with mystic symbols). Taking these, together with the fresh foetus, he proceeded at dead of night to a certain Buddhist monastery, entered the *vihāra* and closed and barred the door behind him. "He lit the candles and laid consecrated wood as a bed for the foetus. Then he put a powerful Viṣṇu *yantra* on its head, a royal *yantra* beneath it, a Viṣṇu *yantra* on its middle, and a Dharaṇī *yantra* on the ground. He then set gilded posts at the four cardinal points, together with *yantras* and flags, and he tied the protective thread around [to ward off interferences]. He overlaid the posts with a canopy having a *yantra* of Indra's golden chains, as prescribed for such occasions. He took charmed Mergui wood and lit a fire beneath the foetus in order to kindle pure life in it. As he sat reciting *mantras* he exposed the foetus to the fire and warmed it throughout, turning it now on its front, now on its back, until, just as dawn broke, it was thoroughly dried."¹ Then, as Khun Phan still recited the *mantras*, up rose Golden Boy and spoke, ready to do his master's bidding.

It is probable that such a spirit as Golden Boy was most useful to his master as giving him confidence that he had no reason to fear the familiar spirits controlled by an enemy. Spirit keeping was common in Siam, even until quite recently. The late Prince Bidya said in 1940 that an elderly friend of his had seriously warned him that a certain person was capable of sending his spirits to harm him. However, Khun Phan's Golden Boy was said to be useful even against human enemies. Once when Khun Phan was sleeping under a banyan tree his Boy came to warn him of the approach of an enemy party. Furthermore, he wove some human figures out of straw, animated them, and sent them to drive off the enemy.

¹ *KCKP*, vol. ii, p. 38.

A personal amulet was needed by every Siamese soldier high or low, also by elephants and horses. We have seen that in the course of the departure ceremony auspicious cordons were put on the heads of commanders and animals. It was evidently the same in Burma, for we read that for the benefit of Kyanzittha's army a monk "recited charms over minium and cinnabar and drew figures of the sun and moon on the frontlets of elephants, on saddle pommels, on shields of every kind, round and embossed, oblong and convex, and on standards of war, and surrounded them with magic charms and sorceries".¹ When Tabinshwehti invaded Siam in 1549, it was observed that he wore a breastplate and bejewelled gold chains covered with charms to secure invulnerability, also a crown engraved with *yantras* for the same purpose.² Furthermore, as in ancient India, the elephants and horses had to be given auspicious names.

Also used as amulets were small images of the Buddha, or sometimes of Hindu deities inscribed with some magically powerful characters or symbols, and generally made by Buddhist monks. They were used both as a protection against malevolent spirits and in war. For the latter purpose, however, a form known as Phra Kring, the Bell Buddha, was the most popular. By Cambodians and by Siamese it was regarded as proof against both cutting weapons and firearms. The Bell Buddha is loose within a little hollow pyramid, the outside of which bears magical formulae and relief figures of Buddhist saints. As the wearer moves, the amulet rattles or makes a little bell-like sound, said to cause all enemies to flee.³ Sympathetic magic is well illustrated by the type of amulet the Cambodians use when they are travelling through jungle country and face the danger of falling a victim to primitive warfare, i.e. becoming the prey of

¹ *Glass Palace Chronicle*, p. 104.

² *AA*, vol. i, p. 34.

³ P. Lefevre-Pontalis, *Notes sur des Amulettes Siamois*, Paris, 1926, p. 16 and figs. 45-7.

head-hunters. The amulet consists of a little seated figure, having a severed head on its lap.¹

Some Siamese soldiers used to wear a nine-gemmed ring when going to war.² Balls of metal were either carried on the person or buried in the flesh. In Burma soldiers "were sometimes tattooed with the image of Kalmāṣapāda (the man-eating king of the *Mahāsutasoma Jātaka*), assimilating themselves to the man-eater by chewing a piece of raw human flesh while undergoing the operation. By this they thought to acquire invulnerability, enormous strength and courage, and the power to jump very high and very far".³

Burmese medical prescriptions for obtaining invulnerability and perhaps invisibility include (1) a compound of the livers of a man, monkey, black dog, goat, cobra, owl, and lizard pounded together at midnight; (2) a mixture of black pepper, zingiber, and honey, over which incantations (*mantras*) have been said.⁴ The last mentioned has to be taken for fifteen days. A Siamese recipe has some resemblance but contains many more ingredients: several kinds of pungent roots and a bitter vine, as well as pepper, cardamom, nutmegs, and camphor, all of which must be beaten into a coarse powder, steeped in hot water sweetened with palm sugar or honey, and then drunk. And the treatment goes on longer than the Burmese: five months to become proof against sword and spear thrusts, three years to have the strength of an elephant.⁵ Similar preparations were drunk or eaten by the Cambodian soldiers, these either being given to them by the chiefs or sold to them by sorcerers.⁶

¹ ibid., p. 15, figs. 23-6.

² G. E. Gerini, op. cit., p. 149.

³ R. Heine-Geldern, "Sculptured Sword Hilts showing Scenes from Buddhist legends," *JISOA*, 1937, p. 149; *Gaz. of Up. Burma and Shan States*, pt. i, vol. ii, pp. 77-9.

⁴ *Gaz. of Up. Burma and Shan States*, pt. i, vol. ii, pp. 73-5.

⁵ *Bangkok Calendar*, 1865, p. 87.

⁶ A. Leclère, *Le Droit Public des Cambodgiens*, Paris, 1894, p. 148.

It is commonly supposed in Siam that for a woman to touch a man's amulet would be to destroy its efficacy. Yet when Khun Phan departed for war it was his wife and his mother who provided him with the necessary amulets. These would then have something of the character of the protective gifts made by Toraja women to their warriors. And an interesting point is that Siamese women left at home when their husbands were away for war or elephant hunting were subject to tabus as regards their behaviour, in much the same way as were the Torajas.¹

Apart from amulets, Khun Phan, his mother, and his wife made another use of the supposed magical efficacy of Buddhism to ensure both Khun Phan's safety in battle and their happy reunion again afterwards. Since, so far as I know, such a custom has not been previously recorded, I think the passage worth quoting in full. The episode occurred just as Khun Phan was resting awhile in the *sāla* of a temple on the river bank. He was soon to join his army which had already crossed the river and was bivouacing on the opposite bank.

"As he stood there alone he saw his mother, T'dng Prā Sri, and his wife, P'ím, drawing near in a boat, so he went down to meet them. Together they decided that as he was going afar they should observe the rite of each planting a Bo tree. If misery should result from the expedition they would ask that that tree should suffer similarly. Having sat down together and come to a decision on the matter, they looked round for suitable shoots. These they didn't pull up roughly but placed them carefully on a ceremonial dish. Getting into their boat, they took the shoots to a place where there was a big outstanding tree growing, and they then made offerings to the spirit who lived there. Having dug auspicious pits, they then each proceeded to plant their shoot.

¹ F. H. Giles, "Elephant Driving," *JSS*, vol. xxv, pt. 2, p. 175.

"Khun Phan's mother, T'òng Pră Šri, was first. 'If death be not escaped, may my Bo tree be destroyed; if I have fever, let the tree have fever too. But if I remain well without sickness may my Bo tree remain agreeably cool and charming to look upon.' Having so said, she at once planted the shoot in one of the pits.

"Then Khun Phan took his turn, saluted, and requested the spirit as follows: 'If I gain victory over my enemies, may this my Bo tree grow big and handsome. But if I die, may this Bo tree also die. If I have no fever, may it be healthy too. If the war is brought to a successful conclusion, may the tree be green and thick.' Having thus implored, he quickly planted the shoot in the pit, filled in the earth, and stamped it down.

"Tearfully P'ím raised her hands and prostrated herself before the spirit. Then, embracing the small and drooping Bo shoot, she invited the spirit by the power of his merits to influence her auspicious golden Bo tree: 'If I, remaining at home, should die, may this tree also die, but if not may the tree flourish. If I have fever and become thin and weak, may the tree wither too. Having planted it, and watered it with her tears, she filled in the hole and flattened the earth. Then they all three each took their scarf, folded it, and placed it round their respective shoot, demanding that by the power of the merit of the scarf that had thus been entwined round the shoots, however far they might go from each other they would return and meet again; but if it should happen that they met death, they would go in happiness to a higher heaven, be in due course born again on earth and then, meeting each other, go on for hundreds and thousands of ages until they eventually entered *nirvāna*."¹

The passage throws considerable light on the relation

¹ *KCKP*, vol. i, p. 192.

of popular Siamese Buddhism to the animism represented by the invoking of the tree spirit to use its influence to make the Bo shoots utilize their supposed magical power in the best interests of the supplicants. The power was presumably transferred, after the invocation, to the scarf of each person, a good example of contagious magic. In some Siamese inscriptions¹ we meet with the planting of Bo trees as a work of merit, sometimes accompanied by a resolution to attain perfection, but this is quite distinct from this magical invocation accompanied by the threatening of the shoots. However, another instance of the protective value attributed to the Bo tree occurs to me: on the third day after birth a triangle of three or seven spots, made from the ashes of the Bo tree, is marked on a Siamese child's forehead.² Probably all these cases to some extent reflect the pre-Buddhist cult of the sacred *Ficus* tree, that was formerly widespread in South-east Asia.

The fortunate month and day for setting out on a campaign had to be decided by the astrologer according to the constellations.³ He should also know the character of the country to be traversed.⁴ The wind direction must be taken into consideration, a wind blowing in the direction of the enemy being most favourable. A wind blowing from the left is favourable, but weapons must be held in the left hand. If it blows from the right the army must not start and must hold weapons in the right hand. If it blows from both sides at once the army must stand firm with weapons held in both hands

¹ G. Coedès, *Recueil des Inscriptions du Siam*, vol. i, pp. 65, 159.

² H. G. Quaritch Wales, "Siamese Theory and Ritual connected with Pregnancy, Birth, and Infancy," *Journ. of the Roy. Anthropological Inst.*, vol. lxiii, 1933, p. 448.

³ The *Treatise* gives tables. Bastian and Gerini (op. cit., p. 37) give examples of the working out of fortunate days. It was perhaps only with the marginal Laos that resort was had to the drawing of augury from the examination of chicken bones; e.g. Nottou, *Annales du Siam*, vol. iii, p. 81. But in matters other than war such augury was common in Burma.

⁴ *Treatise*, p. 27.

and the men must also be able to manage the elephants and horses with both hands.¹

Especially are the following omens to be noted : " If you see a cloud break into many, with Meru form, don't march for it signifies death. The elephants and horses will vomit blood. Visions and signs like these indicate that you will be beaten by the enemy : If it thunders and the wind blows in your face, don't move off, for elephants and horses will jump with fear. Also all the men will tumultuously dispute together. If you see a white garment turn coloured, green, violet, and dark red remember this sight isn't good, so don't go hastily. If objects lose their shadow, vessels of arrack break fortuitously, weapons fall from the hand of their own accord, then death lurks in the forest, so don't follow your intention. If a tree falls at your feet, don't consider this as nothing and don't dare to start. If a bird of prey comes flying softly, this points against marching, so don't go."²

" For fighting you must await a favourable sign. Thus, if the wind blows from behind you can beat the enemy quickly. If you see two crocodile forms together you will gain abundant wealth, obtain victory, and take the enemy's city. If you hear thunder continually behind you, attend to it, for it is the best sign. If you see clouds gather in the open space behind you it is an omen of glorious outcome ; the enemy will be entirely defeated and you will prosper. A splendid and brilliant portent : if you hear the strains of music (conch, gongs, etc.) start in answer to it for it is propitious. Let all Brahmans, elephants, and horses move off in order ; it is a good time to start, so march at once and you will prosper and gain joy. If a bee flies noisily to and fro, quickly move off the army, go with strong forces and you will defeat the enemy." ³

¹ *Treatise*, p. 10.

² For the opposite indication cf. page 153.

³ The information in the above passage from the *Treatise* (pp. 7 f.) may be supplemented by the following omens recorded by Bastian :

The association of ideas in most of these examples is too obvious to need further comment; so also is the supposed significance of the omens to be drawn from cloud movements (i.e. apart from their shapes). The clouds moving from north and west are identified with the enemy, those from the south and east with the Siamese forces, the goal (victory) being represented by the sun. Therefore it will be sufficient for me to summarize the data on this matter¹ as follows:—

Favourable Cloud Movements

Clouds from N.	moving S.	not reaching sun
” ” W.	” E.	” ” ”
” ” S.	” N.	overclouding sun
” ” E.	” W.	” ” ”

Unfavourable Cloud Movements

Clouds from N.	moving S.	overclouding sun
” ” W.	” E.	” ” ”
” ” S.	” N.	not reaching sun
” ” E.	” W.	” ” ”

Invisibility seems to have been obtainable by some form of yogic exercise rather than through the use of war medicine. That both this and invulnerability were firmly believed to be effective is well illustrated by the following passage from the *AA*, which relates the experiences of a small Siamese force, ambushed with their leader, Phya Sri Rac'dec'o, by the Burmans in A.D. 1662. “The Burmans, being more numerous than

“ If you see blood don't leave camp, or if a sword girdle snaps or a bow breaks, also not if insects float in the air or bees fly past and settle on swords or other weapons; their settling on musical instruments is a similar warning. Further, if horses and elephants get into confusion in the first or second night watches, don't start against the enemy, disaster if you do. Further when you ought to be starting on the march and you see people dressed in white clothing, looking as if they were dressed in black, then that is a sure foreboding of great loss of men; do not go any further forward. When weapons fall out of the hands or other objects slip (or fall), then misfortune and defeat stand ahead; do not go further.”

¹ From *Treatise*, pp. 8, 9.

the Siamese, succeeded in capturing many of them. But Phya Sri Rac'dec'o had the power of becoming invisible while he held his breath. Urging on his horse he slew many tens of Burmans with his lance. Sometimes they could see him but sometimes not. They pressed upon him in groups and tried to surround him, but he fought until, overcome with fatigue, he fell from his horse. And because of his fatigue his breathing became rapid. The Burmans could now clearly see him and they surrounded him and urged one another to slay him. But they could not do this because he was invulnerable. So were all his Siamese soldiers invulnerable. Weapons could not wound them and they fought with the Burmans until they were exhausted. Then the Burmans, who were far more numerous, took them captive.¹ Later it is recorded how Phya Sri Rac'dec'o escaped and liberated his men. While still bound he was watching the cloud patterns (cf. p. 153), and when he saw a favourable omen he recited Buddhist *mantras*. Thereupon his fetters fell from him.²

We have it on good authority³ that in the final siege of Ayuth'ya (1767) the Siamese soldiers would not go out and fight until the astrologers had shown them how to make themselves invisible. By that date the art seemed to have fallen sadly into decay.

The strength of the forces which Siamese, Burmans, and Cambodians could put into the field has been commonly much exaggerated, not merely in such fantastic figures as those given in the *Glass Palace Chronicle* and *AA* but even, to a considerable degree, by Europeans whose estimates were usually based on bazaar gossip. Consequently we cannot do better than refer the reader who requires details to Harvey's excellent analysis of the Burmese figures. I shall confine myself

¹ *AA*, vol. ii, p. 71.

² *ibid.*, p. 73.

³ Turpin's *History of the Kingdom of Siam*, Paris, 1771, trans. B. O. Cartwright, Bangkok, 1908, p. 161.

here to mentioning his conclusion, namely that the Burmans could never have put more than 60,000 or 70,000 men into the field.¹ As regards the Siamese, van Vliet was probably not far wrong when, referring to the middle of the seventeenth century, he said that though there were few soldiers in actual service, within two days 60,000 to 80,000 could be raised; while in time of war it was rare to mobilize more than 100,000 men and usually only 20,000 to 60,000 were called on to serve on a military expedition. There were more than 3,000 war elephants.²

The few soldiers in service in times of peace were, in Siam, men of the military division, the guards whose organization in various legions I have described elsewhere.³ Corresponding to them in Burma were also the guards, whose numbers early in the nineteenth century were estimated at about 4,000.⁴

The Siamese retained the ancient Indian tradition of the four-fold army (*caturanga*), but the chariots had, long before the Siamese received the tradition, been replaced by the artisan division. Originally the artisans were engineers engaged on fortifications and arms manufacture, but by the seventeenth or eighteenth century they had largely been transformed into craftsmen occupied with embellishing the palaces. It was probably the same in Burma. Certainly in Anuruddha's time we already find no mention of chariots in the enumeration of his forces,⁵ only elephants, cavalry, and infantry. Hence, one can only express surprise when one finds C. Duroiselle describing a "Pageant of King Mindon",⁶ which took place in 1865, as exhibiting

¹ G. E. Harvey, op. cit., p. 334.

² *JSS*, vol. vii, pt. i, p. 28.

³ H. G. Quaritch Wales, *Ancient Siamese Government and Administration*, pp. 144-8.

⁴ G. E. Harvey, op. cit., p. 323.

⁵ *Glass Palace Chronicle*, p. 95.

⁶ *Memoirs of the Archaeological Survey of India*, No. 27, 1925, reproduced from a Burmese manuscript.

"a display of the forces in full dress of the Burmese standing army at its headquarters at Mandalay . . . a Burmese battalion or regiment consisted of four units—1st infantry; 2nd cavalry; 3rd war-chariots, and 4th elephants, according to the division so well known from Pāli writings."¹ Surely he must have known that this was just a pageant in which the intention was to liken King Mindon to some legendary Indian *cakravartin*. He must also have known that Mahābandula had not used chariots against the British in 1824, any more than he had at his command the flying horse that appears in the pageant on Plate X.

Neither Siamese nor Cambodians had much in the way of cavalry, nor did they know how to make the best use of the small force of horse that they had.² From the old Siamese battle arrays (Figs. 2-7) it can be seen that cavalry were nearly always represented, but both their strength and mode of employment are obscure. Crawfurd had the impression that the Burmans did not use cavalry at all until after they had conquered Manipur.³ That their cavalry was certainly greatly strengthened as a result of this event is confirmed by a Burmese inscription of A.D. 1767 which says that after the invasion of Manipur "the emperor returned with over 30,000 Manipuri cavalry men".⁴ The correct figure was probably 3,000.

Apart from the food supplied by the government for the first two or three days' journey, the local authorities were ordered to make their people provide sustenance for the army. Supplies were brought to the camps by convoys of women, as well as in requisitioned carts. Further afield it was necessary for the men to live off

¹ *Ibid.*, Introduction and Note to List of Plates.

² A. Leclère, *op. cit.*, p. 149; La Loubère, *A New Historical Relation of the Kingdom of Siam*, London, 1693, p. 91.

³ J. Crawfurd, *Embassy to the Court of Ava*, London, 1834, ii, p. 160.

⁴ *Inscr. of Pagan, Pinja, and Ava*, trans. Tun Nyein, Rangoon, 1899, p. 15.

the enemy country, and it seems to have been a constant pre-occupation after pitching camp for many of the men to busy themselves with marauding.

The value of elephants was already well appreciated by the Siamese of the Sukhot'ai period.¹ Although these animals were not always dependable in war, as a general rule the presence of a large force of elephants was a *sine qua non*. They would often advance into the thick of the battle, or against enemy stockades, with apparent disregard of javelin wounds. Moreover, the sight of them often had a terrifying effect on the foe. Human gall, mixed with alcohol, was still applied to the Cambodian war elephants to increase their courage as late as the middle of the nineteenth century.² But it is from the pen of an Italian writer that we have the most detailed account of the custom as practised in Laos in the seventeenth century.³ A noteworthy difference from the Khmer arrangement is for the mahout to mount the crupper of the elephant, controlling the animal with a long goad. The warrior comes down on to the elephant's neck to fight, leaving the umbrella bearer on the throne behind him. The change from the Khmer (and old Javanese) usage was probably the result of preference for such weapons as the imported Japanese sword, in place of the spear or javelin.

The commander-in-chief of a Siamese army was known as the *mē t'ap'*. He might be the king himself,⁴ or anyone appointed by him, most usually the head of the military division. The hierarchy of Siamese officers has already been considered by me in a previous work.⁵ One change from a view I then expressed now seems to

¹ G. Coedès, op. cit., vol. i, p. 62.

² E. Aymonier, *Le Cambodge*, vol. i, p. 54.

³ See P. Pelliot, BEFEO, vol. ii, pp. 52 f.

⁴ According to Bastian, the king, if he accompanied the army, was likened to a flamingo, a swan, a peacock, or a heron, striding across his frontiers, exhorting his troops, and overcoming his enemies.

⁵ H. G. Quaritch Wales, *Ancient Siamese Government and Administration*, chap. vi.

me to be needed. Since the decimal system of grading was not only the same with the Cambodians, but also was very much the same with the Burmans, I am now inclined to think that they all derived it from India, where the same grading was also used, rather than from the Mongols as I formerly believed. The high officers rode either richly caparisoned elephants or horses, according to choice and terrain. They were always accompanied both by their parasols of rank and by their standards for rallying their troops.

Though most Cambodian usages are copied from the Siamese, there is always the possibility of finding here and there a custom that has survived from the ancient Khmers and was never adopted by the Siamese. This I found to be the case when studying the Siamese coronation ritual. In the matter of military officers there seems to be one very interesting example of such a survival in the person of the Cambodian *sena*. "Before each division, often before each unit, a *sena* or herald marched 'sans peur' and bravely provoked the enemy to combat. Chosen from amongst the most courageous and the most eloquent, this officer must never, without an order, retire before the enemy, even when the crossbow bolts and the bullets whistle around him and strike some of those who follow him. The flight of a *sena* could lead to the rout of an army; it was generally punished by death."¹ This officer reminds one of the fore-fighter of Epic warfare.² He seems to be a relic of Khmer times when pitched battles of idealistic type were more frequent.

According to the *Treatise* (p. 3) the eight highest officers of a Siamese army were to be appointed in accordance with certain astrological considerations and the study of their horoscopes. They were called after the Garuda, Tiger, Lion, Dog, Rat, Horse, Nāga, and

¹ A. Leclère, op. cit., p. 147.

² E. W. Hopkins, loc. cit., p. 222.

Elephant respectively. The same series, as we shall see, occurs in certain other classifications and I shall offer an explanation of its significance in the next chapter (p. 154). It would seem that this system must also have been used in Burma, not only because this follows from what I am about to say in the next paragraph, but also judging by the fact that in the nineteenth century each Burmese soldier had the animal symbol of his regiment tattooed on his back: "Dragon, Lion, Rat, and so on."¹

The *Treatise* states that officers whose names (in the above series) are mutually auspicious should be appointed to the same formation. Bastian is more explicit, saying that a Garuda commander-in-chief should have a Rat as his commander of the vanguard, an officer of Tiger name as commander of the right wing, while one with Horse name must command the left. Should the commander-in-chief have a Tiger name, Dog must command the van, Lion the right, and Nāga the left wing.² The Tiger commander-in-chief mentioned in the second case can, however, only be sure of victory if the enemy commander has a Rat name. A foe with a Nāga name would have to be opposed by general Lion, and so on.

Siamese and Burmese weapons consisted of bows, crossbows, lances, spears with curved heads, javelins, and swords. Defensive armour was mainly confined to leather shields and caps of leather or plaited bamboo. But in taking the Cambodian capital of Lowek by assault in 1594, Naresuen's storm troops are specifically stated to have been protected by sandals, leather coats and hats, while the elephants wore iron shoes in addi-

¹ *Gaz. of Up. Burma and the Shan States*, pt. i., vol. ii, p. 501.

² In the former case it will be favourable to begin the march on a Sunday in the 5th week, under the 3rd, 5th, or 6th waxing and take prognostications under the Lion sign of the zodiac; but in the second case a start must be made on Monday in the 5th week, under the 1st, 2nd, or 7th waxing and take prognostications under the sign of the Crab.

tion to their usual flat helmets.¹ La Loubère mentions a coat of mail as being worn.² In one enumeration of weapons in the *Treatise* blowpipes are mentioned. These may have been introduced by the Macassars who late in the seventeenth century were given refuge from the Dutch and then rebelled, using blowpipes. But this weapon has been reported as still in common use in north-east Siam for shooting birds.³ The "long-handled sword" often referred to in Siamese accounts of fighting was undoubtedly a Japanese importation. Large numbers of these Japanese swords have been found in Cambodia, where they were probably introduced in the sixteenth and seventeenth centuries, if indeed there was not then a local factory there under Japanese direction.⁴ Firearms were introduced by Europeans, probably not before the sixteenth century.

One might wonder why, if the Siamese had undergone so much Khmer acculturation, they did not adopt the most distinctive of Khmer weapons, the *phkăk*. The reason why they did not may be gathered from the probable history of the varying esteem in which *phkăk* and sword were held, as has been suggested by Coedès⁵ as follows: The Khmers kept the *phkăk* to themselves as long as they were powerful, and invested their feudatories with a sacred sword. In the case of the Siamese of Sukhot'ai this was the *Jayaśrī*, stated in the inscription of Wat Mahādhātu⁶ to have been given by the Khmer emperor to the T'ai chief. After the fall of Angkor it was a sword with which their kings were invested as vassals of Siam, a sword with the Siamese name of *p'ră khăn*. Meanwhile

¹ *AA*, vol. i, p. 188.

² La Loubère, op. cit., p. 167. It was probably similar to the coats of mail of the Môn princes, which were really coats covered with steel scales (E. Lorgeou, "Somdet P'ra Maha Chakrap'at," *Recueil de Mémoires Orientaux*, 1905, p. 189.)

³ Turpin, op. cit., p. 68. *JSS*, vol. xxviii, pt. 2. p. 187.

⁴ G. Groslier, op. cit., p. 88, fig. 55 L.

⁵ G. Coedès, *BEFEO*, vol. xxxii, p. 534.

⁶ G. Coedès, *Recueil des Inscriptions du Siam*, i, p. 68.

the *phkăk*, "hostage sword" or "weapon of the prisoners of war" had become included among the Siamese royal insignia.

A young Siamese nobleman, bent on a military career, could hardly do better than first serve in the usual way as a novice in a Buddhist monastery. There the abbot would impart those important aids to military proficiency, the knowledge how to become invulnerable, how to employ discarnate spirits, and which were the right *mantras* for sending people to sleep or rendering an opposing force immobile. That indeed was the basic military training that Khun Phan had before he entered the royal service.¹ Afterwards, though we are not told of it, he may have received some instruction in the *Treatise* from senior officers. This work, though evidently composed by Brahmans, was intended to be taught by the experienced officers to the juniors. One can gather this from the exhortation to learn and teach that we find early in the *Treatise* (pp. 5 and 6). I translate as follows :—

"Attend to the astrologer's predictions and patiently recite the formulæ prescribed for establishing a fortunate army. Then if the enemy attacks he will be beaten. Even if his army is large and ours is smaller he will be easily beaten. Do according to the astrologers' prognostications, then your luck will be good and you will return safely to get money and rank, the rewards of war. So carry out the royal work and don't fear to make war. Don't be timid and fearful, you who must learn the way of shooting people and serving in the army. The king will nourish, reward, and protect you and your family in every way."

"Attend to the work at all times without fail. Don't associate with wicked and depraved people. Don't pretend friendship but truly keep to the right minded. Anyone who plans evil against the king shall be

¹ KCKP, vol. i, p. 50.

destroyed. Respect sacred discourses and imagine no deceits. This will be of value. Serve the king and do according to ancient precept. Our great king rules by divine choice. If anyone plans to harm him, support him and do not waver nor be disdainful of your duty. Act against the danger without fail, so that the king's reign prospers. Even if an enemy attacks he will be defeated, and our happy soldiers will sing, dance, and play the violin and flute.

"So let brave soldiers study these verses. Do not perversely drop such study, but patiently master it. Then, if you are ordered to attack a city, victory will be yours. As to those of you who are wise in these matters, have compassion on anyone who wants to learn. When you yourself have studied and learnt, pass on the knowledge to your children, for this will aid and prosper posterity. Don't speak ill of your teachers, you who are wise in the *Treatise*, keep to the just way."

Later in the *Treatise* (pp. 17-18), after final victory is supposed to have been won, there is a further exhortation in similar vein. "Now all you happy officers, satisfied with your rewards, go study and teach, according to the ancient *Treatise*, to your children and nephews. You, who are unequalled, all become teachers of these eternal usages as told since ancient times. Study, investigate, and preserve your skill. Your wisdom will bring you power and happiness. Don't indulge in evil, blinded by your passons, and don't try to teach what you don't know. Study first. Then teach the sacred book to others so that they may do the king's work. Always study and do not defame, and do according to the *Treatise*, not allowing it to fall into oblivion. Morning and evening recite prayers from beginning to end, with both lips and heart."

There is more in the same vein, including such admonitions as "Don't get drunk on arrack" and "Respect the Brahmans". Recalling the efforts of the

Toraja leader (page 17), indeed of the magician throughout the ages, to affix the blame for his failures on someone who must have broken a tabu, we shall not take the Siamese Brahmans' concern for the morals of the military too seriously. In fact we need not hesitate to suppose that they were most interested in providing scapegoats who would save unlucky astrologers from the penalties which, as we shall see (page 188), were liable to be meted out to them.

Before setting off to war it was customary for the commander-in-chief to have an audience of the king, that is if the latter were not himself accompanying the army. His Majesty would then make the general some traditional gifts. "I give you a weapon to take to the war," said the king to Khun Phan at his leave-taking audience; "the hilt has a demon enclosed in it. I also give you clothes: tight breeches, a splendid waist cloth worked with gold, and a pointed ornamented hat."¹

Very likely the hilt of the sword the king gave Khun Phan was carved with a representation of Kalmāṣapāda, the man-eating king of the *Mahāsutasoma Jātaka*. At any rate this was commonly the case with Siamese and Burmese sword hilts, as with those of the Bataks. The invulnerability and strength associated with the Indian *rakṣasa* figure of Kalmāṣapāda had probably passed to it from some local pre-Indian man-eating demon previously associated with invulnerability.²

Later on Khun Phan made a sword for himself, probably utilizing the knowledge he had gained in the monastery, since there is nothing on such matters in the *Treatise*. The passage in *KCKP* describing his sword-making runs as follows:—

"To make a sword Khun Phan set about collecting

¹ *KCKP*, vol. i, p. 191. And similar occasions are mentioned in the chronicles.

² R. Heine-Geldern, "Sculptured Sword Hilts . . .," *JISOA*, 1937, pp. 147-158, pls. xvii, xviii.

suitable iron, to be consecrated by *mantras* as laid down in sacred works. He got iron from the spire of a relic shrine, coffin nails of those who had died violent deaths, metal of a black bronze (*sāmṛid*) lance, a copper keris¹ and a broken sword, nails from city gates, the five kinds of iron also.² He melted these in a crucible, this excellent iron, together with black bronze, red gold and silver, and formed from them an ingot. While red hot he beat this out flat, and then he steeped it in magic chemicals for three days, according to prescription. Having repeated this seven times, at the auspicious hour he cut wood and built a *sāla*. Then he brought together the ritual utensils : golden candles and offerings of rice cakes, pigs' heads, ducks, and chickens. He prepared a bellows and anvil for the ceremony, with the necessary charcoal. He got a clever smith, dressed in white, surrounded the place with the protective thread, laid down metal *yantras* and got an astrologer to announce the appropriate time : mid-day in the sign of the Lion.

"Khun Phan blew the metal and made it red. The smith forged it, giving it a sharp point, and making it straight, 8½ inches wide in the middle, a short cubit long, and smooth. He steeped the red iron in water and then he filed it until it was quite smooth. Then it was brilliant, with no irregularities, indeed it had the sheen of a green beetle, and it sparkled like the sun's ray. Then Khun Phan made a hilt of good wood, engraved a powerful *yantra* on the metal haft and inserted some of the hair of a fierce dead person (who had suffered violent death). Then he fastened the hilt with resin. This finished, he brandished the sword. The sky darkened and, with loud peals of thunder, a shower fell, a sign at which he rejoiced. Khun Phan gave his sword the auspicious name of Sky Blade. Placing it on the altar in the *sāla* this

¹ The keris was known in Siam as a ceremonial weapon, sometimes given by the king to courtiers (La Loubère, op. cit., p. 168).

² Probably iron from different places as with the making of keris blades, and as in ancient India.

shook, showing how powerful was the sword.”¹ Khun Phan was pleased at what he had achieved. He ordered the smith to make a suitable scabbard, embossed with silver and gold, and he rewarded the smith accordingly.

Lastly I may mention an interesting point of magical symbolism to which Professor Heine-Geldern has drawn my attention : Karl Döhring states,² on the authority of La Loubère (op. cit., p. 26), that Siamese soldiers formerly wore red, the colour of the warlike planet Mars which presided over the south, and that is why military officials were on the right (south) side of the king in audience. No doubt it was because of this that, when about 1691 the administration of the country was divided between the heads of the military and civil divisions, the former (*kalahom*) was given charge of the southern provinces. As to the derivation of the word *kalahom* or *kralahom* Prince Dhani, referring to the phrase *vrah kralā-homa* in an eleventh century Khmer inscription, which has been translated “ sacred sacrificial area ”, thinks that this might mean a place where Brahmanical rites before war were carried out under the control of the general.³ This reminds one of the Khmer general Saṅgrāma’s preparations we have mentioned on page 85.

¹ *KCKP*, vol. ii, pp. 44–6.

² *Siam*, Munich, 1923, vol. II, p. 18.

³ *JSS*, vol. xxxi, pt. ii, p. 77.

CHAPTER VII

SIAM AND BURMA : THE MARCH AND COMBAT

"At the auspicious moment, sound the great gong, play the flute, beat the drum, and all cheer loudly. Then let the great army march, unfurl the standards of victory! In the van go the chief elephants when the army marches away, then go the other elephants, the cavalry, and the carts. Let them march along the jungle trail until they come to a suitable place to encamp."

Thus enjoins the Siamese *Treatise*,¹ though it often seems to have been the custom for the king or commander-in-chief to embark with a portion of the army in barges, and to travel by river for the first day or as far as might be convenient. According to Pallegoix,² just before the army embarks at the capital, an executioner strikes a blow with an axe at the head of a dummy representing the enemy. Should the head fall with a single blow the omen is favourable, the contrary if it does not. This divination may be a survival of the duel which, as we have seen on page 86, may have been fought for a similar purpose, just before the start of a Khmer expedition.

Later in the *Treatise* (p. 28) more detailed rules are laid down for the order of the march, according to the nature of the country to be traversed. In passing through dense jungle the elephants should go first to clear the way, with the infantry and carts next, and the cavalry guarding the rear. If the way lies through thorny jungle, elephants should go first as before, but should be followed by cavalry and carts, then porters, and lastly

¹ *Treatise*, p. 11.

² Pallegoix, *Description du Royaume Thai ou Siam*, vol. i, p. 315.

the infantry and cannon. If the route is through a rocky mountain gorge, infantry should march along both sides of the gorge, then elephants and carts should follow, and lastly the cavalry. Over a plain of tall grass and shrubs the cavalry should be sent first in order to beat down the vegetation, the infantry following and then the carts. These are all purely practical arrangements, probably learnt from the experience of repeated incursions into Burma.

Of course a look-out has still to be kept for omens, favourable or the reverse : " If on the march you see clouds in the form of a Garuḍa this would mean defeat if you looked back. If you see a double pattern (in the clouds) then the king's council or the queen will die. If you see a triple one then you will win after a hard battle ; a quadruple pattern means you will conquer. A quintuple pattern portends great losses among the nobles. If you see a sextuple one go no further or you'll be food for crows and vultures. . . . If the men marching hear the call of a bird on their left, which then flies off and settles on a tree on the right hand side, then great booty will be gained. But it is very unlucky if it settles on a tree stump or decayed trunk. If the bird comes flying past from the south-east and shrieks loudly while it is poised over the way, then misfortune is in its voice, for it says ' the enemy will be over you even before the day is ended '. If the bird flies on in front of and beyond our marching forces, then it is leading us forward.¹ Everyone must follow its lead with haste and spirit, for the enemy is certainly in that direction. According to the hour of day, animals coming from the right or left are propitious or unpropitious."²

Supposing that no fatal omen has been encountered, causing the army to hesitate, after several days of march, with nights spent bivouacing beside some stream

¹ An instance of this is mentioned in *AA*, vol. i, p. 35.

² Bastian, loc. cit.

with great fires lighted to keep off tigers, the army will have reached enemy country, unless, of course, it has been sent to repel an invasion. In that case it will come within the zone of possible operations well inside its own borders, for it was never the custom to attempt a serious defence of the frontier. Whichever way it was, it then became necessary to build a defended camp, one of the stockaded enclosures that figure so largely in Siamese and Burmese military history. It is the army's field base for attack or defence.

This encamping is not a matter to be undertaken lightly. It entails the choice of a suitable site known as the *c'āi ph'um*, literally "place of victory", but here meaning the auspicious point at the centre of the divinatory circle which is found in certain Cambodian manuscripts with nearly the same series of eight animals at its cardinal points as was used in Siam. The circle was also used by the astrologers to fix the auspicious site for a new city, the *ph'um* or auspicious centre of which must be in relation to one or other of the auspicious appearances representing the animals of the cardinal points, from which it was known as a Garuḍa name, Dog name, Nāga name, city, etc., a classification which had to be taken into consideration by an enemy wishing to storm it.¹

It seems to me that the probable explanation of the importance thus attached to this use of the divinatory circle was to establish the city or camp as a microcosm, the central point of which would be considered to coincide with the axis of the universe through which the divine power could aid the defenders. It is then understandable that a fortunate *c'āi ph'um* was said to assure victory even to an army that was far weaker numerically.²

In the same way the appointment of the eight great

¹ See L. Finot, "Recherches sur la littérature Laotienne," BEFEO, vol. xvii, pp. 188 f.; C. Notton, *Annales du Siam*, vol. i, p. 196, n. 5, and vol. iii, p. 55; Bastian, loc. cit.

² *Treatise*, p. 14.

commanders in the manner mentioned in the last chapter would have the object of bringing them into relation with the king as the immediate source of divine power at the centre of his army.¹ But we cannot say to what extent the Siamese themselves were conscious of any such original significance.

The auspicious appearances that have to be sought in order to establish one of the eight favourable types of site for a camp (or city) are those which recall the habitat of one or other of the animals of the cardinal points. The types of *c'āi ph'um* are : Garuda, if a white ant hill and a very tall tree are in evidence ; Tiger, if near a forest path, with the cry of deer frequently heard ; Lion, if there are three big trees standing in line on a mountain considered to resemble the Himalayas ; Dog, if beside an old path, near a village ; Nāga, if beside a canal or river ; Horse, if in a field from which animals are seen running away ; Rat, if the ground shows signs of white ants on which rats feed ; Elephant, if there is grass mixed with bamboo thickets.²

However, it would seem that if the scouts bring news that the enemy has already established his camp on a certain type of *c'āi ph'um* this is a circumstance which must govern the Siamese choice. Thus, if the enemy has chosen a Lion, Tiger, or Elephant site, only Lion will be propitious, but if he has chosen Nāga, the answer will lie with a Garuda site. If the enemy has established his camp on a Dog site, the Siamese must choose a Tiger one.³ In each case the association of ideas is fairly obvious.

The instructions for building the camp and the discipline to be maintained are as follows : " Post the elephants and cavalry in good positions to protect the

¹ Cf. *Mahāvamsa*, xxv, where King Dutthagāmani when going into battle surrounds himself with thirty-two bodies of troops, with each of which he places an image of himself.

² *Treatise*, p. 5.

³ *Treatise*, p. 14.

main army. Let the porters cut wood and make camp with the help of the soldiers. Then the pandits and astrologers must make calculations. A gateway must be built, with a gong for marking the time. Then build the fortified camp with ditch and mound.¹ Lay down spikes (caltrops) and have an elevated area inside the camp. Outside and inside the camp bury talismans to avert misfortune and to protect against the enemy. Then make careful examination and build a shrine to the spirits of the place. Make offerings to them so that they shall take pity and bless your design.² Explore stealthily outside the camp, placing bodies of troops to right and left. Go about in company, never alone. At night the troops must build fires here and there, and sentinels take turns to watch. Let them tie up and bring in anyone found near the camp. Let the soldiers watch the fires and take turns in guarding. Stop persons coughing or groaning in their sleep. See that guns, bows and crossbows, elephants, horses, shields, and other weapons are properly distributed.”³

During the day foraging claimed much attention. In the evening, so long as danger was not imminent, there were entertainments and music in the camp, especially on an aggressive expedition.⁴

A rule which apparently had to be observed at all costs, from the frequency with which it is repeated, is that no on account, whether in marching, camping, or assembling the forces in battle array, must the army

¹ Surmounted usually by a stockade, apparently strong but easily breached by a determined assault with elephants (Pallegoix, op. cit., i, p. 318). A. Leclère (op. cit., p. 156) gives similar details of the fortified camps (*bantéay*) of the Cambodians.

² The importance of enlisting the help of any local deities is stressed in another reference to encampment in the *Treatise* (p. 18): “In order that the local spirits may help, make a spirit shrine. Don’t disdain to respect the spirits, dismount from elephants and horses and ask the spirits to bring you great victory. Make offerings to them with candles, tapers, incense sticks, and food.” For Burma cf. Harvey, op. cit., p. 184.

³ *Treatise*, p. 11.

⁴ Hmannan, in *JSS*, vol. v, p. 4.

face Rāhu. This rule was evidently of universal application among the Indianized peoples of South-east Asia, so there is no hesitation in asserting its Brahmanical origin, at any rate in the form in which we know it. Varāhamihira, the sixth century A.D. Indian astronomer, though he himself recognized the true nature of eclipses states that the eclipse was then generally regarded, on the authority of the seers of old, as the work of Rāhu, a monster with the shape of a huge snake, "moving through the signs of the zodiac."¹ Rāhu, that is to say the cone of shadow projected by the earth during an eclipse, was regarded as the eighth planet, or god of the ascending node. His character was extremely malicious, so that to face him, wherever he was supposed to be according to astrological calculation, was equivalent to facing Mrityu (Death). According to the *Treatise*, one must march and draw up troops only "in accordance with Nāga scales". This must mean, since the Nāga was regarded as a serpent having crocodile-like scales, that the forces would be facing in the same direction as Rāhu, not facing his mouth. According to Bastian's information, even if you have the strength of Brahmā, Viṣṇu, or Indra, you cannot hope to win if you are facing the Nāga.

It was undoubtedly the same in Burma. "The position of the Nāga during the month must always be noted with care, and care must be taken to avoid facing its mouth in travelling, trading, and enterprises generally."² In the fifteenth century a Môn army is stated to have marched out of Pegu "in accordance with Nāga scales".³

So also in Java, where we have seen (p. 51) that the extract of a MS. quoted by Raffles gives some

¹ *Bṛhat-Saṃhitā* of Varāhamihira, chap. v. English trans. by H. Kern, *Verspreide Geschriften*, vol. i.

² *Gaz. of Upper Burma and the Shan States*, pt. i, vol. ii, p. 48.

³ *Rājādhīrāja*, Siamese version, P'anic' Sūphoth Press, Bangkok, 1934.

particulars as to the position of the Nāga at each season of the year, and ends with the injunction : " In going to war in these seasons be careful not to face the head of the Nāga." The purport of this will now be better appreciated in the light of the comparative data just given.

The battle array, into which a Siamese army (consisting of main army, wings, van, and rearguards) was arranged, is of great interest from the point of view of cultural history. In ancient India, although the battle array (*vyūha*) was more associated with the pitched battle of idealistic warfare, it was by no means confined to that. This was partly because it might often be the intention of a commander to fight a pitched battle until obliged to give up the idea. It was also partly because it was the custom for an army to march and camp, as well as fight, in battle array, at least when in enemy country or wherever there was a chance of being attacked. The array was thus very largely a defensive mechanism. And probably it was mainly in this way that the Siamese employed it too.

Of the twelve arrays (counting the two varieties of the *cakra* as one) which are described and illustrated in the *Treatise*, and reproduced at the end of this book (Figs. 2-7), nine appear to be intended for purely defensive purposes. The various units of which the army was composed were posted in accordance with one or other of the arrays when on the march or within the camp. In listing them below I place first the name and description of each as given in the *Treatise*, this being followed in parentheses by Bastian's definitions which probably reflect the attempted explanations of the later edition.

Makara vyūha : For crossing a river, the head going first, the tail following. (Bastian has the same.)

Cakra vyūha, circle or wheel array : (a) to be established on the summit of a hill rising from a

sunken area ; (b) to be drawn up on the summit of a hill which rises from a plain. (Not mentioned by Bastian.)

Padma (Siamese *prāt'üm*) *vyūha*, lotus array : To be used in the middle of a plain, not far from a hill. (Bastian : when in the middle of a plain the army waits for the assault.)

Krod vyūha, sharp or powerful array (according to the meaning of the Siamese word *krod*). For mountain defiles and narrow passes. (Bastian, who gives the name as *korakot*, i.e. *karkataka vyūha*, crab array, says it is to be used "when they march in a narrow valley".)

Prēta vyūha, demon array. For use in the jungle. (Bastian : when posted in a narrow defile.)

Sinīha vyūha, lion array. To be established sixty metres from the hills. (Bastian : for storming the foot of a hill.)

Sūryā vyūha, sun array. To be drawn up in the middle of a plain, like the midday sun. (Bastian : when in serried ranks in open fields.)

Sahasrāñśu vyūha, 1000-rayed array. For use at a certain time (first day, first watch), with the carts in the centre, then elephants, and cavalry on the wings. (Bastian does not mention.)

Nameless. By a mountain pass wait like this. (Bastian does not mention.)

The remaining three arrays are definitely stated in the *Treatise* to be used offensively. They are as follows :—

Garuda vyūha. For attacking a large army. (Bastian says that this term is applied to an army coming down from a height.)

Syena vyūha, eagle array. For attacking a medium sized army. (Bastian : when attacking in columns.)

Mahimsa vyūha, buffalo array. For attacking a small army. (Bastian : when the forces struggle through swamps.)

In ancient India the *vyūha* were differentiated

according to the various divisions of the army, or combinations thereof, of which they were composed, the character of the terrain, or the particular array used by the enemy. Here we may note (without attempting to determine what may have been the function of each differing arrangement of components) that the first two forms of differentiation were known to the Siamese. On the other hand there is no suggestion of use against any specific enemy array, and in the case of the three offensive arrays only the enemy's size is considered. The explanation of this would seem to be that the Burmans, at any rate, the principal enemy, no longer used traditional arrays, and what was done by Cambodians or Lao would be of little account. The study of the Siamese arrays thus suggests that they were falling into disuse, except as defensive formations in conjunction with certain types of environment. Those that still might be used offensively took into consideration only the size of the enemy's forces. The latter was, of course, an important factor, and was admitted to be so, despite the supremacy of magic : "Look at our army and at the enemy's," says the *Treatise* (p. 5), "if the latter is weak, use double his force."

Of the Burmese armies in their sixteenth century wars with Siam, as recorded in *Hmannan*,¹ we know only that the Burmese army, like the Siamese, had wings, main army, van and rear guards, the king or commander-in-chief usually being in the centre or towards the rear, while princes sometimes commanded the other divisions, and that each division had infantry, cavalry, and elephants, though the cavalry were chiefly used for reconnoitring in advance. It is also stated, on one occasion, that the vanguard had 200 elephants "distributed among the infantry". Dr. Hla Pe has been so good as to examine carefully the original Burmese text of *Hmannan* and informs me that he finds

¹ JSS, vol. v, pp. 4, 15, 24, 25.

no mention of the use of *vyūha*.¹ We may conclude that in actual fighting the old formal arrays had little place in the wars between Siam and Burma, though, as I shall show later, we have evidence that for defensive purposes they were still used by King Naresuen, and probably later.

We may now consider the works of the Burmese poet Letwethondara which purport to deal with Burmese strategy. Dr Hla Pe kindly read and translated for me sufficient portions of these works to enable me to form a definite opinion as to their documentary value. The first one is entitled *Senanga Vyūha*, written in A.D. 1785.² From its being a homogeneous composition, attributed to a known single author, we should not expect it to bear any resemblance to the Siamese *Treatise* which deals with many other aspects of war besides strategy, and shows all the signs of loss and accretion indicative of a long evolution. However, if anyone expected to find in the *Senanga Vyūha* a genuine study of Burmese strategy, whether based on observation of contemporary usages or on a critical study of historical documents, he would, I fear, be sadly disappointed.

Letwethondara, though a high official was also a poet, and he is famous for the fine court verse that he wrote. It is only the nature of the subject matter of the *Senanga Vyūha* that suggests at first glance that one might have here a treatise in verse rather than a lofty poem unfettered by sordid reality. Moreover, we must appreciate that the author was a product of the literary spirit of his time. He lived in a period of triumph,

¹ It should be added that the mention of such technicalities is extremely rare in the *AA* also.

² The Rangoon manuscript was edited by U Ba Thaung and printed and published by the Hanthawaddy Press, Rangoon, 1943. The illustrations in the printed edition do not exist in the Rangoon MS. and, according to the preface, were copied from some later MSS. at Mandalay, not at present available. They are little more than outline drawings, sometimes geometrical, sometimes with an attempt at naturalism. They seem to be nineteenth century efforts to illustrate the poem.

following the conquest of Siam and Arakan, and wealth and power brought the desire for "culture", which had by no means been a marked feature of Burmese court life since the fall of Pagan. This desire for "culture" was met by the importation of nine Brahmins from Benares, learned in the lore of *India*.¹ Under their guidance queens, courtiers, judges (such as was Letwethondara), and other high officials became learned too. "Almost everyone studied and almost everyone wrote. The age of triumph was an age of learning," says a modern Burmese student of the drama, but he also admits that this age of learning was an age of translation, though the Burmese literati often adapted what they translated : " Experts in the study of Pāli, Sanskrit, and Buddhistic lore, keen students of foreign institutions and literatures, they were essentially Burmese, and enriched their own language and literature with borrowings from all sources. The period 1770 to 1824, the date of the first British conquest, that period of triumph, may easily be termed the age of translations, so keen were the people for knowledge from all sources. Siamese romances, Pāli *Jātakas*, Chinese histories, Siamese and Cambodian chronicles, a history of Portugal, a Sanskrit work on sexual science—this list made at random shows clearly the range and variety of the translations." ²

It is necessary to bear in mind Letwethondara's background, as sketched above, in order to appreciate that his work differs mainly from the products of modern nationalism in that the latter are to some extent influenced and controlled by the canons of modern research. In the pre-scientific age imitations or poetic adaptations of a foreign work on the art of war, without mention of sources, would have found as ready

¹ E. Forchhammer, *Jardine Prize Essay*, Rangoon, 1885, p. 105. He states that the Brahmins aided Burman scholars in the translation of no less than sixty Sanskrit works into Burmese, but he mentions only a few of the titles.

² Maung Htin Aung, *Burmese Drama*, Oxford, 1937, p. 43.

acceptance in Burma as did, during the same period, the numerous adaptations and imitations of the newly introduced Siamese *Rāmāyaṇa*.¹ Indeed, it was only a later manifestation of the old Burmese practice of claiming that the Buddha had visited Burma, and of transferring Indian legends and place names to Burmese localities, so that what has been called a "system of mythical geography" has arisen.²

The *Senanga Vyūha*, which shows evident adaptations to Burmese environment, as for example in the names of the military officers, is probably based on some such work as the *Nīti-prakāśikā* of Vaiśampāyana, a sixteenth century Indian compilation, which would have been known to the nine Brahmins from Benares. The *Nīti-prakāśikā*, despite its name, is really a work on the art of war, with cantos on the composition of the army, the military arrays, and rules for marching and camping, and it says (vi, 10) that the *vyūhas* were (by that time) to be counted in thousands.³ Now the *Senanga Vyūha* similarly has cantos which deal very vaguely and remotely with the same subjects. Thus it tells us of six offensive and six defensive *vyūha* which are to be used in pairs as follows⁴ :—

OFFENSIVE.	DEFENSIVE.
<i>vāri-vēga</i> (water stream)	<i>nadīcara</i> (river bed)
<i>dvijādhipa</i> (Garuḍa's wing)	<i>śakaṭa</i> (cart)
<i>usabha</i> (king of oxen)	<i>uddhana</i> (oven, hence tripod)
<i>dhanuka</i> (bent bow)	<i>madhuka</i> (beehive)
<i>makara</i>	<i>pādaṅka</i> (crowsfoot)
<i>bhuja</i> (snake)	<i>vicchika</i> (scorpion)

Their spurious character, so far as Burma is concerned, may be said to be proved immediately by the simple fact that they presuppose the use of the same arrays by the enemy, and we have seen that, with the exception of the *makara*, the Siamese know nothing of these arrays.

¹ Maung Htin Aung, op. cit., pp. 49–51.

² Sir C. Eliot, *Hinduism and Buddhism*, London, 1924, vol. iii, p. 50.

³ P. C. Chakravarti, op. cit., pp. viii and 115.

⁴ Some of the names appear to be in Sanskrit, others in Pāli form.

The *Senanga Vyūha* is moreover explicit as to the use of each array, e.g.: “*Vicchika vyūha*: arrange the forces like a scorpion; if the enemy uses *vicchika vyūha* you use *bhujaga vyūha*, if he uses *bhujaga*, you use *vicchika*.” Incidentally, this use of one array against another is the one form of ancient Indian use that is not mentioned in the Siamese Treatise. On the other hand, the *Senanga Vyūha* gives no information as to the use of any specific array in any particular environment, and no details of the units of the army from which each array should be constituted.¹

I therefore have no hesitation in concluding that the arrays given in the *Senanga Vyūha* do not represent anything of historical significance for Burmese warfare²; and this accords with the conclusion to which I had already come after the study of the Siamese evidence, namely that the medieval Burmans no longer employed the *vyūha*.

Lewethondara wrote another and longer poem, entitled *Vyūha Sakki*, in A.D. 1790.³ It purports to show instances of the actual use in Burmese historical campaigns of the *vyūha* named in his earlier work, without giving any evidence and despite the fact, as I have already mentioned, that *vyūha* are not mentioned in the

¹ A Burmese MS. in the Bangkok National Library, which Luang Boribal Buribhand kindly had photographed for me, appears to be a nineteenth century copy of part of the *Senanga Vyūha*. It has coloured illustrations, each array being represented merely by a slightly different geometrical shape, and each made up (so far as the shape permits) in exactly the same way, from the four divisions of the army: infantry (with cannon), elephants, chariots, and cavalry, the uniforms, etc., being approximately the same as those of the “Pageant of King Mindon”. The existence of this MS. came to my knowledge through its being mentioned in *Explanatory Notice on the Display of Ancient Warfare*, Bangkok, 1922, where it is accepted (p. 20) as “a Burmese manuscript on ‘Military Art’ which shows the different battle arrays used by the Burmese.”

² The question of tracing Lewethondara’s sources in foreign literature must be left to others, and is in any case of no concern to us here. I have merely suggested the sort of quarter in which a searcher might be rewarded.

³ It was printed and published in the same volume as *Senanga Vyūha* in 1943.

Burmese chronicles. Though definite statements are seemingly not too easy to disentangle from the background of lofty platitudes and vague poetic utterances, the following gem, deprived of poetical embellishments, will serve as an example (p. 100 of the printed work) : Naresuen of Siam advanced to the Burmese frontier with an army of 200,000 infantry, 7,000 cavalry, and 600 elephants. He drew up his forces in *denkapara vyūha*. The Burmese Crown Prince then attacked with his forces in *makara vyūha* (as prescribed in *Senaniga Vyūha*). Naresuen was defeated with heavy loss.

In judging Letwethondara's attempt to superimpose his recently acquired learning on Burmese history we must bear in mind not only that he was a poet, but also that, though relatively near to us in time, he was as remote from the spirit of modern critical research as were his ancestors many hundreds of years before him. And what we see here is only a somewhat accelerated example of a phenomenon of acculturation of which, as we have seen in the course of this study of ancient warfare, we have continually to beware in evaluating literary sources. It is only the relative isolation of the Burmans, as compared with the Môns and many other peoples of South-east Asia, from the main currents of Indian cultural influences, that forced them to attempt rapidly to assimilate, whenever opportunity offered, huge chunks of Indian culture, which more favourably situated peoples absorbed more gradually—and with less conspicuous symptoms of indigestion.

Letwethondara's effort is thus most interesting from the point of view of cultural psychology, but his indirect value to history is by no means inconsiderable. Had there been a living tradition in Burma of Burmese battle arrays when he wrote, such a high official would have known of it, and such a patriot would no doubt have made use of it. It is inconceivable that the Siamese could have preserved a series of *vyūha* that they had

borrowed from the Burmans at the end of the sixteenth century (contrary to the whole character of Burmese warfare though these would be) while after only 200 years the Burmans should themselves have lost all memory of them so that they had to import these Indian cultural traits anew. This, in my opinion, affords a final proof that the Siamese *vyūhas* are not of Burmese origin but must represent a large part of the residue of the ancient treatise on the art of war issued by Rāmādhī-pati II on the basis of information derived from the Khmers, with the addition of firearms in the case of some arrays. And it is interesting to note that the one *vyūha* testified by epigraphy to have been known to the ancient Khmers, the *cakra*, appears also in the Siamese list.

The tactics developed in Burma by Bayinnaung and introduced into the Siamese army by Naresuen with still greater success, were basically those of guerilla warfare : the drawing on of an enemy by feigned retreat, ambush, and surprise attacks, with the avoidance of unnecessary risks. It corresponds to the less treacherous aspect of Indian realistic warfare, and has much in common with Chinese and modern ideas on war as developed wherever terrain and limited numbers, rather than the use of masses of men and overwhelming firepower, are the controlling factors. Being thus a practical response to environmental conditions, it tends to be similar wherever found and to shed the cultural features which are our chief interest here. Hence we shall not go into great detail over this kind of warfare, directing our attention mainly to those cultural features that were preserved. These in ancient India were indeed intended for use, not only in idealistic, but also in realistic war.

The way in which the realistic tactics were first effectively employed by Bayinnaung may easily be gathered from reading the Burmese chronicles. For example, in 1568 the Burmans divided the Lao king of

Wieng Chan's forces and defeated them in detail by vigorous attacks.¹ But this Lao king was no slower to learn from the Burmans than was Naresuen for he afterwards led them a wearisome chase through the jungle, always managing to elude final defeat and capture.²

The general style of the tactics introduced and practised by Naresuen may be gathered from the following extracts from the *Treatise* (pp. 12-15). These probably date from his time and they assume that the Siamese commander's forces are weaker than the enemy's, as Naresuen's were at the time he undertook to free his country from Burmese domination :

" If the enemy come surreptitiously, rush out [from the camp] and capture them without shouting. But if they press, get good troops ready in the morning as soon as you can, sending scouts in advance and keeping close together. Let the rear companies hasten to reinforce and not hang back. Let those in front attack, let not the commander hesitate. Those behind don't be slow to help. That is the way to defend the camp.

" When the enemy attacks, if you have ample strength don't hesitate to spread out, fall on impetuously and pursue. But if he appears to be coming in large numbers, don't rush on like that, but prudently take cover. Do as did the royal lion in the Rāma story when he retired gradually from the man-eating ogre. . . . Don't flee precipitately as this will only embolden the enemy. If, however, you do flee, don't go far, but wait and withdraw crawling. . . .

" If you meet the enemy, rush in and seize them if they are few—don't withdraw. But if there are too many then wait and retire crawling. If they don't see you thus retiring, spy on them but don't let them see you. Watch them near in without fear. Seize and bring

¹ *Hmannan*, trans. *JSS*, vol. v, pp. 61 f.

² *ibid.*, p. 74.

in some of them tied up and then question them about the operations, why they came and what is the position of the enemy's camp. If they appear to answer untruthfully, flog them. If they tell the truth, consider what stratagems the enemy may use to deceive you. Spy out, and estimate carefully, the enemy's strength.

"Storm the enemy's camp. Attack the weakest place, using many ruses and repeatedly changing them. Strike in the night. If the enemy then break and, being afraid, fall into confusion, when men, elephants, and horses are in turmoil and the leaders are terrified and cannot control their men, then burn the enemy's camp."

Twenty-one recipes for stratagems are tersely described in the *Treatise*, variations of the decoy and ambush theme. The success with which, as history shows, these simple ruses were so frequently rewarded, indicates on the one hand how poor the scouting must have been, and on the other, that the basic urge to rush headlong upon the enemy in frontal attack continued very strong, whenever it was possible to believe that the enemy's forces were decidedly the weaker. The concise language in which these recipes are given renders them by no means easy to translate and the following two examples, in rather free translation, may suffice to show their character.

"A stratagem called 'concealing one's game': Assemble the troops and select those who are brave and reliable. Then draw the foe into the trap. Dispose infantry, elephants, and cavalry, arranging them in serried ranks. Make a feint attack and then flee. Bring up the army on both flanks. Bring up the elephants and cavalry to attack the rear and both flanks. Turn the enemy's elephants so that they flee. Fire and shout loudly. Fight and surround the foe on all sides. Deploy at a given signal. The enemy will be destroyed."

"A stratagem called 'hiding in the woods': Station a few of your troops to attract the enemy, hiding the

greater part of the army in the near by jungle. Dispose these in a circle with inner and outer rings, taking care to hide elephants and horses. Then [when the decoy force is attacked] make the hidden men shout loudly and set up a clangor of gongs and drums [so as to give the impression of much greater strength]. Then the men, armed with guns and crossbows should attack, and then make use of their swords, while the elephants and cavalry also attack the enemy on all sides. Meanwhile, the porters keep up the din, beating shields here and there in the jungle [to maintain the impression of large reserves]. When they see the brave men pursuing them and attacking tooth and nail, seizing many, the enemy will be completely disheartened.”¹

Not only Naresuen’s ability as a tactician but his personal courage and determined leadership were the secrets of his success.² And in his earliest exploits he showed utter disregard for his own safety. For a Siamese prince to risk his own person in battle was a matter for general astonishment, for such an example as that set by Rāma K’amhèng of Sukhot’ai, who engaged an enemy leader in single combat on elephants,³ had become increasingly rare. That was especially the case during the period of relative peace and prosperity that Ayuth’ya had enjoyed since the conquest of the Khmers and of the Lao of Chiengmai. Yet it was by the old methods of idealistic warfare that the Siamese army, though weak and inexperienced, met the first

¹ *Treatise*, p. 20. For a typical and early example of the employment of such a ruse, see E. Lorgeou, loc. cit., p. 195; *AA*, vol. i, p. 86.

² Such tactics could indeed only be successful where there was resolute and skilled leadership, coupled with strict discipline. When these were lacking, as was too often the case after the beginning of the seventeenth century, and with increasing suspicion and fear of falling into traps, we get war reduced to the skirmishes and indecisive partial actions which make the reading of so much of the later military history of Siam and Burma, in common with that of most of the rest of South-east Asia, tedious in the extreme. This was not the fault of the ordinary Siamese and Burmese soldiers who have never been accused of lack of courage by those who knew them well.

³ G. Coedès, *Recueil des Inscriptions du Siam*, vol. i, p. 44.

serious Burmese attempt to take Ayuth'ya in 1549, an attempt which failed owing to lack of preparation. And it was in the fierce open fighting that then ensued that the valiant Siamese queen Suriyot'ai and her daughter, armed and mounted on elephants, fell in battle in coming to the assistance of King Chakrap'at who had got into a dangerous position.¹ But it was almost immediately after this that the Siamese had their first experiences of Burmese realistic tactics, notably when the king's two sons fell into a trap and were captured when too audaciously pursuing the retreating Burmans.²

By guerilla tactics and good leadership Naresuen built up his power of resistance. When the Burmese Crown Prince first invaded Siam in 1588, after failing to take Naresuen's camp, he tried a feigned retreat. Although the Crown Prince's army had its centre and wings all similarly composed of all three divisions (infantry, elephants, and cavalry), Naresuen recognized that the left wing was weaker and attacked and routed it first. Then he forced the centre under the Crown Prince's command to retire, and finally he turned his attention to the right wing which, though it held its ground, had not the spirit to retrieve the day. The Crown Prince was then prevailed upon by his generals to return to Burma, although not recalled by his father, King Nanda Bhureng. In 1590 he tried again. This time he fell into a trap near the frontier, through following a decoy force, and then was ambushed by Naresuen who routed him with heavy loss. The Crown Prince again returned to Burma and was reprimanded by his father.

In 1592 King Nanda Bhureng called together his sons and nobles and reproached them for lack of zeal in invading Siam. In the course of the audience they admitted that, although Naresuen's forces were not a

¹ *AA*, vol. i, p. 35; W. A. R. Wood, *A History of Siam*, London, 1926, p. 113.

² *AA*, vol. i, p. 44; E. Lorgeou, loc. cit., p. 201.

quarter of theirs, "in war success did not depend solely on numerical strength, the principal factors were valour and tactical skill,"¹ They resolved, however, to try once more. A large army, under the command of the Crown Prince, was mobilized, and the Burmese prince then ruling Chiengmai was ordered to provide a rear-guard. In giving now a rather full account of this great episode in Siamese history, in which the Burmese Crown Prince was slain in single combat with Naresuen, and a resounding victory was gained which freed Siam from the Burmese peril for many years to come, I do so because it gives us examples of the actual employment of some of the cultural usages which we have so far studied as purely theoretical considerations in the *Treatise*. Indeed, this campaign is almost unique in that the accounts we have of it provide us with sufficiently detailed information of the kind of special interest to us. This unique character is very largely due to the fact that, even judged by the formal standards of ancient India, this battle, owing to Naresuen's bravery and resolution in standing firm against immense odds, developed in a manner indistinguishable from idealistic warfare and so would be likely to exhibit to the full whatever cultural features were still alive. Even though some of the details in *AA* may be later interpolations, their style is quite traditional.

The main events of this battle will already be well known in general terms to those who have read Wood's *History of Siam*. But that author, in an effort to keep well within the bounds of what is generally acceptable as history, systematically omits every detail of cultural and psychological interest in the episode.² I therefore base the following account mainly on the *AA* (vol. i, pp. 145-159) together with Prince Damrong's *Commentary*

¹ *JSS*, vol. viii, pt. 2, p. 49.

² Nai Thien, in his translations from *AA* (*JBRS*, xxv and xxviii), omits or misunderstands many of the points of most cultural interest.

thereon (Bangkok, 1914, pp. 645-658), but only in the quoted extracts do I reproduce the actual words of the *AA* in translation. The Burmese chronicles naturally differ considerably in their account of the battle, putting down the death of the Burmese Crown Prince to an accident, but the romantic story of the Siamese *AA* is borne out by the history of Pegu and also by the account of van Vliet.¹ So as not to break up the narrative, comments on points of special interest to us will be placed in footnotes.

The Burmese army advanced by two routes, but we are concerned only with the Burmese force under the Crown Prince which came via the Three Pagodas Pass, since the second Burmese force ultimately withdrew without fighting. At that time Naresuen had considerable forces under arms, since he was thinking of attacking Cambodia when the news came of the Burmese invasion. Consequently he was quite ready to give the invaders his attention instead.

The Burmese army coming via Three Pagodas duly arrived at Kanburi. The Crown Prince found this town deserted and rightly concluded that the Siamese king must have learnt of his intention. However, he was unable to capture any Siamese peasants to interrogate. While a bridge was being built across the River Meklong, to transport his forces across, an incident occurred which at first caused him some concern. The royal umbrella over his elephant was caught by a sudden whirlwind and flung down. He sent for the astrologer and asked him if this did not betoken evil. The sage replied that had it happened in the morning it would have been unlucky, but as it was afternoon it portended ill for the enemy.² The Crown Prince decided to advance, and he took up a position some distance north-east of Suphan, sending forward from there a force of 300 horsemen to scout.

¹ "Description of the Kingdom of Siam," *JSS*, vol. vii, p. 32.

² Cf. similarly reversed interpretations of Toraja leader, p. 6.

Meanwhile, Naresuen characteristically decided that his available forces, though much smaller than the enemy's, were sufficient to warrant his going to meet the enemy nearer the frontier. Accordingly he gave orders for the army to be ready to start by water at a certain time declared by his astrologer to be auspicious : Sunday, 11th waxing of the second month, at 8.30 a.m. At that time Naresuen and his brother Prince Ekat'otsarot " having attired themselves for war set forth in their royal state barges named Sri Sāmāthc'ai and Krāisōn Mük' P'imān respectively, with the brilliant royal insignia, tiered parasols, golden fans and victory standards, beautiful and splendid with the whole procession of nobles' barges arranged in order before and behind. At the auspicious moment the astrologer struck the gong of victory, the other Brahmins blew the great dextrorse conch and the other conches, and beat the other gongs and drums with resounding din. Then the procession of barges set forth. At 2.24 p.m.¹ camp was pitched at Pak Mok for the night. Then the order was given that at 5.18 a.m. the royal army would set out by land. At 4 a.m. the king dreamed that he was moving in a boat over a great flood that had come through the western forest and that he was there attacked by a huge crocodile, which he killed. On awakening he informed the astrologer. The latter explained that this meant that there would indeed be a great battle, and the king would fight a fierce elephant duel but would win and would destroy his enemy. The king was very pleased at this prediction. Having armed himself he went to await the correct moment. Then, as he glanced upwards, he saw the sacred relics of the Buddha, bright like an orange, moving through the sky by supernatural power. Coming from the south, they

¹ Such apparently irregular times are simply due to the old Siamese reckoning of time, according to which the hour was divided into ten periods of six minutes each.

passed in a right-handed manner away to the north. The king was overwhelmed with joy. He raised his joined palms to implore victory.¹

"The astrologer ordered the conches and other instruments to be sounded. The king and his brother each mounted a great *mush* elephant. Together with the princes, ministers, and high officers they set off with the army in ordered ranks and reached Ban Sakeu Salau. Then they marched across the plain from noon to 3 p.m. when the vanguard reached Nong Sa Rai. Here the king stopped under a fine tall tree north of a white ant hill. This presented the appearance of a Garuḍa name *c'āi ph'um*. He gave orders for a camp to be pitched here, with van and rearguards and wings, in the form of the lotus array (*p'rātūm p'āyūhā*, i.e. Skt. *padma vyūha*, see Fig. 5, A.)"

When the Burmese reconnoitring party of horsemen brought back news of the above developments, the Crown Prince decided that, as his army was two or three times as large as that of the Siamese, he would attack them at once. After that it would be easy to go on to Ayuth'yā.

"At 5 a.m. the Crown Prince attired himself, putting on a gold cuirass adorned with gems, a mantle and three gold chains with emeralds, while he donned a great royal crown of Peguan style with its high crest resembling the head of the king of Nāgas²; and he put on his amulets

¹ Bastian gives as favourable portents immediately before a battle the following : a lovely little girl in glittering clothes, a man of kingly appearance stepping forward, a water pitcher, a clean rice bowl, pretty white flowers, a statue of Brahmā, a priest clad in white, a picture of the Master or the figure of a saint. Unfavourable omens are : a burning pile, a span of an ox or buffalo or animals fighting together, the sound of someone weeping, red flowers, a leaking water pitcher, a broken drag (vehicle), a sharp-pointed stake, the fallen beams of a building, broken or fallen rafters, a bald man, a criminal, people who are fighting or running away in fear, a madman, a man falling from a roof or tree, sharp splintered sticks on the path.

² G. Groslier, op. cit., fig. 35, shows examples of Khmer crowns with Garuḍa or horse-head crests. Though Naresuen is said only to

too." With his nobles, also mounted on elephants, and his bodyguards, he took his place among his forces. There is no mention of any traditional array. It is simply stated that the Burmese forces were arranged in seven lines, each made up of seven legions (*kòng*). Then the gongs were sounded and the Crown Prince gave the order to march.

"As to King Naresuen, as soon as he had taken up his position by the tall tree he quickly had a strong camp built. When he noticed the Burmese cavalry scouts galloping away on the horizon he remarked to his officers that evidently the Crown Prince had sent them to gain information. It appeared, he said, that there would be a big battle next day. The king then ordered an officer to leave at 5 a.m. with a small reconnoitring force. The main army was to be ready to advance at 6 a.m. The commanders prepared the forces in accordance with the royal orders."

Some particulars of the numerical strength of the Siamese army are now given in the *AA*, but no reliance can be attached to the figures. Then "the army having been drawn up with all its units in order (forming van, wings, centre, and rearguard), the astrologer invited the king and his brother to take ceremonial baths (*mürth'aph'isek*) for victory. Then they attired themselves in warrior (*kṣatriya*) garb, for that day, Sunday, they would enter the field of battle. They armed themselves, too. The Brahmans made offerings to the *devas*; and Khun Māhavic'ai cut down a tree to curse the enemy."¹

have worn an ordinary leather cap, earlier Siamese kings went into battle wearing pointed crown and full ornaments.

¹ This ceremony is often mentioned in the *AA* as being carried out just before a battle. Though absent from our *Treatise*, it was evidently Rāma III's intention to restore it, since he mentions it in his edict of 1825 among the old usages about which he wished the compilers of the new edition to collect information. It was carried out in Burma, too, at any rate by the Mōns (*Rājādhīrāja*, p. 301), who probably passed it on to the Burmans. Since it exactly corresponds to the rite of imitative

Just then sounds of firing were heard and a messenger soon arrived with the news that, contrary to orders, the small reconnoitring force that had been sent forward had come to blows with the enemy and now was fleeing before them. Naresuen decided not to send reinforcements, which he said would only be defeated in their turn. It would be better to let the enemy come on in disorder, thinking as they evidently did that they were driving the whole Siamese army before them. Thus the king turned to good account the mistake made by his officer. He used it to draw the enemy into a trap, as he had on previous occasions done purposely by staging a feigned retreat.

"It happened just as the king had foreseen and the Burmese army advanced in careless disorder. As Naresuen awaited the correct moment for action he noticed a huge cloud coming up from the north-west. Then it returned and dispersed before it reached the sun, which remained clear and brilliant in the sky."¹

The king and his brother urged forward their great *musth* elephants, while the soldiers shouted and the martial music rang out.² Soon these two fierce elephants,

magic which we have seen performed in similar circumstances by the Torajas (p. 12), it seems likely that it was originally a widespread Malayo-Polynesian and Môn-Khmer usage. Nai Thien omits this passage, and on another occasion so far misunderstands the rite as to translate : "pass under an arch of success made of branches of trees whose name exerted an inimical influence on the name of the enemy" (cf. *JBRS*, vol. xxviii, pt. 2, p. 12, and *AA*, vol. i, p. 123).

¹ This accords with the *Treatise* rules for interpreting cloud omens, which we have considered on p. 189. The period of waiting for the auspicious moment must have been tedious for the troops. Though not specifically stated on this occasion, it may have been the custom for them to take part in war dances while waiting, which would both encourage and entertain them. It is recorded that the Burmese soldiers did so while awaiting the signal for action against King Chakrap'at's army before Ayuth'ya in 1549 (*AA*, vol. i, p. 85). One of the dances was a sword dance such as is also mentioned in the Siamese *Palatine Law* of A.D. 1458.

² Martial music: While silence was necessary in carrying out stratagems, once battle was joined the rule of silence no longer applied. Then according to Bastian "a mighty noise breaks out, the gong sounds loudly and the drums are beaten, all the cymbals are struck

driven on by their royal masters, had forced their way through their own vanguard, and the generals on their elephants as well as the bodyguards could not keep up. Except for a few retainers, the royal brothers soon found themselves alone and right in among the Burmese forces. These were streaming forward in complete disarray. So dense was the dust cloud, however, that the Siamese could not even see each other, let alone clearly distinguish their enemies. "Then King Naresuen called upon the *devas*, saying they had made him king that he might preserve the Buddhist religion, now let them help him by clearing the atmosphere so that he might see his enemy. And the *devas* were pleased to order the wind angel to blow away the dust cloud."

As the dust cleared, the Siamese saw many elephants around them and amongst these they distinguished that of the Burmese Crown Prince, accompanied by a large troop of soldiers. Then King Naresuen is said to have challenged him in the following words: "Brother prince, who stands under the shelter of that tree, come out and let us fight together for our royal honour, and to be remembered in the days when there no longer are *kṣatriyas* to fight thus." The Crown Prince, though he was a poor general was no coward, and he refrained from giving the word to overwhelm the two Siamese leaders by sheer weight of numbers. Instead he accepted the challenge and, driving their elephants to the charge, single combat was joined. The Prince struck a blow at the King with his curve-pointed spear. It pierced his leather cap, but did not wound him.¹ Again the combatants drove their elephants forward. Now it was

together, the trumpets blare, the cymbals ring, and the bells peal, and the war cries surge up in roaring accord". It is interesting to note that the *kāhala* is mentioned among the Siamese martial instruments of music (e.g. *AA*, vol. i, p. 143).

¹ The version of the *AA* known as Luang Prasoet's History (*JSS*, vol. vi, pt. 3, p. 17) states that in the fight with the Crown Prince the King was slightly wounded in the arm, because the combat was not begun exactly at the auspicious moment.

Naresuen who smote the Burmese prince with his long-handled sword, cleaving him through the shoulder so that he fell dead from his elephant. Meanwhile, the king's brother had engaged the Prince of Zaporò in single combat and had succeeded in killing him. In both these fights it is recorded that the elephants of the victors had done their share by forcing their tusks under their opponents, thus causing them to stagger.

The Burmese forces now made a general attack on the Siamese rulers. A situation which would soon have ended disastrously for them was quickly changed by the arrival of the Siamese army, though not before the mahouts of both the royal elephants had been killed. Demoralized as they were by the death of their leaders, and disorganized by their too hasty advance, the Burmans could not withstand the shock of the Siamese attack. After a short fight they broke and fled, the Siamese taking many prisoners and capturing a large number of elephants and horses. However, they did not pursue the enemy far, for sound strategic reasons. They had to bear in mind that another Burmese army was known to be approaching by another route ; but in fact this was recalled and the king of Burma, hearing of the death of his son, abandoned the whole undertaking.

The value of this account, especially in regard to such technical details as it gives, can hardly be overestimated. But if one would catch something of the atmosphere and spirit of the medieval Siamese battlefield, which is hardly to be expected of the dry chronicler of royal occasions, one may perhaps legitimately quote a passage from that homely and unpretentious work the *Story of Khun Chang Khun Phan*.¹ Moreover, it is possible that the reader, who has already been regaled with some of Khun Phan's warlike preparations, may like to know how he acquitted himself in battle.

¹ The dating of the material in this story has been discussed on page 124.

Khun Phan's expedition against the Lao of Chiengmai was a relatively minor affair, and there is reason to believe that he had been entrusted with only the vanguard of the king's army which was thought sufficient for the purpose. It seems largely to have been a matter of infantry, Khun Phan and some of the other officers being on horseback, likewise the two Lao generals Fa Län and Sän Badal. The extracts which I now give in translation refer to the fighting between the Chiengmai Lao and the Siamese. And although in a historical novel the deeds of the hero are likely to be somewhat romanticized, we know from the *AA* that, punctuating the monotonous record of skirmishing and indecisive actions, such hard fought battles did occur whenever a determined leader appeared, one who was prepared to set his men a good example.

"Just then Khun Phan, standing like a royal swan poised for battle, saw the Lao moving out to the attack. So he ordered his three lieutenants quickly to prepare the soldiers for battle. He blessed oil¹ to anoint his officers and men. Then, at the auspicious time, he rode out suitably accoutred on his superb horse, with his tumultuous army, accompanied by the cheering of the soldiers and the beating of gongs. At the same time the cannon were fired and the sound echoed back from the woods afar. The Lao were dumbfounded at the cannon's roar and at the sight of the smoke that darkened the sky as though it were night. Although they had been advancing they now stood stock still staring. . . .

"Fa Län then drove forward his men, and tumultuously they crowded to the attack. The Siamese shouted and fired their cannon again. Then the spearmen rushed

¹ This mention of the use of oil for anointment is interesting, since in later times in Siam it had been replaced under Buddhist influence by water, e.g. in the coronation ritual (cf. *Siamese State Ceremonies*, pp. 76, 79).

upon the enemy.¹ Disorder spread among the Lao ranks, those hit by cannon balls rolled over, while others staggered and with difficulty remained upright. Some, hit by powder pots,² were scattered and fell. Flames rose and stung the eyes. But the Lao also fired their cannon and many Siamese were killed or injured. Indeed, the Siamese gradually weakened and fell back. Fa Lă̄n continued to drive his soldiers to the attack, and these, brandishing their swords and spears, pressed the Siamese back, while the din and shouting echoed to the forest.

"Khun Phan saw how things stood. He urged his horse forward and sword in hand he rode at the enemy. He made straight for General Să̄n Badal. He struck at him fiercely but Să̄n Badal parried the blow with his lance head. He tried to escape and he swore as his horse stumbled. Khun Phan struck at him more and more vehemently and clove him through the shoulder. Fa Lă̄n saw this and came to his aid, but Phya Kă̄mp'ĕng P'ĕt prevented him and he fell from his horse. Khun Phan then struck Fa Lă̄n and cut off his head which fell to earth. The Lao troops seeing both their leaders slain broke and fled. The Siamese pursued and smote them. Some ran with blood streaming from their wounds, and many of the injured fell dead. The Siamese army followed and slaughtered the Lao as they fled in disorder, leaving elephants, horses, and weapons behind them in their terror. Those with families living along the route of their flight abandoned them. Lampang did not resist, its people fled; and the inhabitants of Lamp'un sought refuge in the jungle. The Siamese rested satisfied in their camp, sending out parties to obstruct the route from Chiengmai and to

¹ In earlier fighting we read that "some closed in from several directions to strike with swords, some rushed in from right and left to use their spears".

² Probably jars filled with powder, ignited from a distance by musket fire.

collect booty. Only Ban Čom T'ong prepared to defend itself. But its people had done no harm. A spirit made Khun Phan think of Lau T'òng [a minor wife of his at Ayuth'ya] and mercy entered his heart. *He* could go on campaigning indefinitely, but his men had obtained women and loot and wanted to return to Ayuth'ya."¹

Siege warfare as practised by the Burmans and Siamese is a matter about which we need not speak at length, for the reason that this was the department of war in which European influence in fortification and the introduction of cannon had made themselves most deeply felt. To go into detail about sieges of which we have most information, that is to say those from the beginning of the seventeenth century onwards, would be virtually to leave the sphere of local methods of warfare for a study of westernization. The progress made in the art of fortification of cities is already clearly seen by the siege of Syriam in 1612. This had been greatly strengthened by the Portuguese adventurer de Brito, but was eventually taken by the king of Ava by resort to mining. Such mining and counter-mining, as well as the use of heavier battering cannon against well-built bastions constructed under the supervision of French engineers, became the chief characteristics of later long-drawn sieges. And the dropping of logs and boiling pitch by the defenders, though giving a picturesque touch to the chroniclers' accounts, are only features common to all medieval sieges.

Generally speaking, cities seldom fell except as a result of treachery. However large the besieging army it was often found impossible to prevent the besieged from getting provisions from outside (especially at Ayuth'ya owing to the many rivers and creeks). The besiegers also suffered heavy losses from starvation and disease. Thus, when Nanda Bhureng laid siege to Ayuth'ya in 1586 he was compelled to retire after five

¹ *KCKP*, vol. i, pp. 202-6.

months because of his losses. These were partly due to famine and disease, partly to the harassing tactics of Siamese guerillas and to bold sorties led by the young Prince Naresuen. Without regard for his personal safety, he was often observed on foot leading his men in assaults on the Burmese camps. But when in 1600 King Naresuen laid siege to Toungoo in Burma it was he who was compelled to withdraw because the enemy had succeeded in denying him provisions.¹

The Cambodian chronicles, in their account of the first capture of Angkor by the Siamese in 1352, afford evidence of the Siamese aggressive vigour of the time. This indeed had been demonstrated only two years earlier by the foundation of the new capital city of Ayuth'ya within such favourable striking distance of the Khmers. The Siamese had the advantage of abundant reinforcements, the Khmers were weak and decadent; nevertheless the fortifications of Angkor must have seemed immensely strong. Though the siege was a long one, the city was actually stormed, not taken by a treacherous ruse as was so usually the case. The final assault is described thus :—

"When the attack came, the fight between the attackers and defenders of Eyntapath (Angkor) was terrible. The Siamese climbed courageously to the assault, but the Cambodians repulsed them from the walls and hurled them into the moats. Unfortunately, one of the east gates was forced and the enemy penetrated within. The battle continued in the streets and the Khmer king, who resisted heroically at the head of a small force, was killed in close combat." This virtually ended the defence, though the Court Brahmans, on this occasion, were able to escape with the royal insignia and other precious possessions. "The capital was in the hands of the enemy. The king of Siam paraded there as master, admiring the royal palaces, which were all

¹ *Hmannan*, trans. in *JSS*, vol. viii, pt. 2, p. 57.

made of stone covered with sculptures, and the very beautiful royal apartments.”¹

For the rest, I shall confine my consideration of siege warfare to giving a translation of the instructions for taking a city, provided by the *Treatise*. While not as yet noticeably influenced by Western mechanics, these instructions indicate clearly enough the reliance that has now come to be placed on stratagems.

“ If the king wants to take a city, surround it strongly with a multitude of elephants and cavalry, closing all means of egress. If some people somehow still manage to go in and out, stealthily seize them, ask them the reason, and consider what is to be done about it. If there is an exit from the city, where is it? Tell them not to be silent but to answer truthfully. Then think out a suitable stratagem. Consider how many elephants, horses, soldiers, and cannon must be got ready.² Having thought of a suitable stratagem, act accordingly and without hesitation. Even if the intelligence be trustworthy, think out still other stratagems.

“ Surround the city so that none can escape, patrol the outskirts all of you good men, elephants, and horses and forage for food. Select brave men to enter the city by wile at night when the enemy is asleep. Take in fuel and quickly set it on fire in many places. Consider how to escape, for with skill you can avoid all risks.

“ Someone should volunteer to lead the attack. The commander thereupon orders the city to be stormed. At dawn let the elephants, cavalry, and foot flock forward to the assault. Some should put up scaffolds and scaling ladders, others quickly build fighting towers. Pull up the cannon and shoot continually, ruining all the city. Burn the city, let its flames rise brightly. Fire the

¹ A. Leclère, *Histoire du Cambodge*, Paris, 1914, “Le Cambodge des Chroniques,” pp. 204, 205.

² A note towards the end of the *Treatise*, which appears to be a later addition, speaks of the importance of seeing that the men do not get sick or weary.

cannon again until the enemy can fight no more and are destroyed. Then let the cannon, crossbows, horses, and elephants, crowding together for mutual protection, force their way into the city.

"Now seize the nobles and bring them in tied up, also firmly tie up the soldiers and lead them away, battered and beaten. Of the large and small guns and arms of the enemy, of the treasure in the twelve treasuries and the royal riches, choose out the best for the king. Then the soldiers should help each other in collecting the goods of the city population. The common people's property goes to the soldiers. He who gets it keeps it, household goods belong to him who takes them.¹ Pursue those who flee from the walls, burn the whole city until it is completely destroyed. Finally the army shall withdraw, following its rearguard and well protected on each flank."²

Immediately after the capture of a city and during the pursuit, the slaughter was often very heavy, much more so than during the actual fighting. Those of the civilian population who could not escape and were not taken prisoner were often massacred. Buddhist temples were ruthlessly destroyed. Towns that submitted peacefully to the Burmans were not molested, but both these and captured towns were required to raise a levy. This augmented the size of the Burmese invading army. It also meant that only a small occupation force need be left in the town since most of its fighting men had been removed.³ Kind treatment of prisoners by the Siamese is claimed in the Sukhot'ai inscriptions⁴ and is confirmed in later times, except in the case of rebels.⁵

¹ This is not in accordance with art. 70 of the *Law of Offences Against the Government*, which says that *all* booty belongs to the king; but it is probably more realistic and is in agreement with Manu (vii, 96).

² *Treatise*, pp. 15-17.

³ *JSS*, vol. xi, pt. 2, p. 26.

⁴ G. Coedès, op. cit., vol. i, pp. 45 and 107.

⁵ Pallegoix, op. cit., vol. i, p. 321.

The prisoners' lot as slaves of war was a relatively easy one and has been treated by me elsewhere in some detail.¹ It is also said that, despite the cruelty practised by the Burmans during the conduct of the fighting, the treatment of the Siamese prisoners made to settle in Burma was lenient, so long as they remained law-abiding.² The carrying off of civilian population was a main objective in war.

The Burmese chronicles frequently mention the revelry and entertainments in which the Burmese soldiers indulged after the capture of a town.³ But ritual required attention also. A Cambodian king, if he himself commanded an army, had to be purified by his Brahmans with lustral water after the battle, whether he was the victor or the vanquished, for he could not remain soiled with human blood or even the emanations of spilt blood.⁴ The practice was probably general. It was usual for victorious Indochinese kings, be they Siamese, Lao, Burmese, or Môn, to attend the funeral rites of any member of the defeated royal family who had either been killed in battle or died as a prisoner. And then they sent the relics to the relatives.⁵

The rewards of successful soldiers came in the first place from their loot. With the Burmans the practice is said to have been as follows : " As regards the spoils seized in the battle, only elephants, horses, arms, and ammunition were held as state property, while the rest, including men, cattle, gold, silver, wearing apparel, and food stuffs were made over to the persons who captured or obtained them."⁶ Again it is said that after the capture of a town and its population " there was the

¹ H. G. Quaritch Wales, *Ancient Siamese Government and Administration*, pp. 60 f.

² *JSS*, vol. xi, pt. 2, p. 54, note.

³ e.g. *Hmannan*, trans. *JSS*, vol. v, p. 74; vol. xi, pt. 2, p. 51.

⁴ A. Leclère, *Le Droit Public des Cambodgiens*, p. 147.

⁵ *ibid.*, p. 166.

⁶ *Hmannan*, trans. *JSS*, vol. v, p. 9.

usual looting but arms and ammunition had to be sent to the camp of the commander-in-chief, and the rest of the booty, including men, women, gold, silver, etc., became the property of the person who had been able to seize it".¹ This seems to agree with the Siamese custom as stated in the *Treatise*.

Then there were the rewards distributed by the king to those who had deserved well, and these it would seem included every soldier who had killed or captured an enemy. While the *Treatise* refers to the subject only in very general terms, the Siamese *Palatine Law* goes into considerable detail. This is especially interesting since this law dates from A.D. 1458, a time when Khmer influence in such matters was strong. I translate the passage as follows:—

"If one who fights mounted on an elephant defeats his adversary he shall be rewarded with a gold hat and gold embroidered garment. He shall be raised to *săk na* grade 10,000,² but if already of that grade he shall receive a gold umbrella and a golden palanquin. If he kills his opponent's elephant he shall receive a golden vessel of rank, a gold hat, a gold umbrella, and a wife. The same reward if he kills the enemy.

If an ordinary foot soldier helps a warrior mounted on an elephant to gain the victory he shall be raised to the rank of *khün*, and rewarded with a *lak* (100,000) of silver coins and a *lak* of gold ones, and his children and great grandchildren shall be maintained by the king. The warrior on the elephant shall be similarly rewarded.

If a cavalryman fights and kills a man, he shall be rewarded with a gold basin and with cloth and shall be raised in rank.

If a foot soldier kills or captures a man he shall receive

¹ *Hmannan*, trans. *JSS*, vol. xi, pt. 2, p. 25.

² The highest grade; presumably, therefore, in this case the elephant warrior was already a chief of some importance. For explanation of *săk na* grade, see my *Ancient Siamese Government and Administration*, p. 35.

a gold basin and also cloth. If he takes a horse his reward shall be a silver basin and cloth.

If any low official up to 400 grade captures a prince he shall be rewarded with a *lak* of gold and a *lak* of silver, and shall also be given land and wives. If he captures an elephant he shall get a catty (eighty ticals) of silver, a gold betel box, and some cloth.

If picked soldiers go in the van, opening a way for a successful attack by the army which results in the enemy being driven from the field, each of these chosen men is to be rewarded with a catty of silver, a gold betel box and cloth, and raised to the rank of *khün*.

If anyone fights and defeats his enemy he is to receive 20 ticals of silver, a gold betel box, and cloth. If he fights against two opponents and escapes alive, bringing back the enemy's weapons, he shall receive a gold basin and cloth and be promoted to *khün*.

But if infantry, war boat, elephant, or bodyguard officers are on duty around the royal camp and an enemy succeeds in penetrating by wile to the king's tent, those officers' heads and feet shall be cut off and impaled as an example. Likewise if an enemy succeeds in setting the camp on fire.

If the army is going into battle in regular order, and a man falls back three elephants' lengths from his place, he shall be executed. Whoever fights on an elephant and turns to flee on it shall be struck down from his elephant and beheaded, and his family shall be destroyed also.

If a war barge falls behind a boat's length, the men shall be put in chains, if two lengths the men shall at once be sent to cut grass for the elephants,¹ if three lengths the men are to be executed.”²

¹ Considered a most degrading punishment.

² D. B. Bradley, *Corpus of Ancient Siamese Laws*, vol. ii, pp. 103 f. The same is repeated in the *Law of Treason* (Bradley, ii, pp. 241–267) together with details of other military offences and punishments, of

No soldier could claim his reward unless he could produce tangible evidence for his success, in the shape of his victim's head. One is reminded of the two Khmer warriors on the bas-relief (page 104) holding up heads for the king to see. In 1549 King Tabinshwehti, having stormed a Siamese camp, gave a feast for those of his horsemen, no less than four-fifths of their number, who had succeeded in taking enemy heads. He had a high platform built on which the successful warriors were regaled at the royal repast, and this celebration went on for three days. Meanwhile the unfortunate minority, seated beneath the platform, had to exist on the scraps which fell from above, including the water in which the heroes had washed their hands.¹

Such lavish rewards and such severe punishments must have provided a strong incentive to soldiers to do their best even though most of them had been by no means willing recruits; and certain officers were appointed to watch and report on the conduct of all during the battle. The Cambodian laws were similar; and the astrologer who had been so unfortunate as to choose an inauspicious site for a camp, or an unlucky day for battle, was also severely punished, either for negligence or for supposed treason.² In certain cases soldiers who had been found guilty were allowed to expiate their crimes by carrying out some dangerous mission against the enemy, in which they would have a chance to reinstate themselves. For example, the generals who had failed to keep up with Naresuen on the occasion when he killed the Burmese Crown Prince were afterwards put on trial. They were pardoned on condition that they would go and capture Tavoy and Tenasserim, which they did.

which I have given some account in *Ancient Siamese Government and Administration*, pp. 158 f.

¹ *AA*, vol. i, p. 36.

² A. Leclère, op. cit., p. 150.

Finally, we come to naval warfare on which we may be brief. Burmese, Siamese, and Cambodian kings all maintained several hundred war barges which they used on the rivers in support of their armies, or on coastal expeditions. In 1569 the king of Burma, having marched his army to the Mekong, wished to attack Wieng Chan. Having no war barges, without which the attack could not be made, he is said to have caused his soldiers to build 300 of them in the forest in the space of three weeks.¹ In later times each barge had a swivel gun in the bow, but tactics do not seem to have changed much from those employed by the Khmers and Chams. Symes gives a good account of the Burmese naval power at the end of the eighteenth century and of the style of naval warfare that was then general.

"Every town of note, in the vicinity of the river, is obliged to furnish a certain number of men, and one or more boats, in proportion to the magnitude of the place. I was informed that the king can command, at very short notice, 500 of these vessels : they are constructed out of the solid trunk of the teak tree . . . the largest are from 80 to 100 feet long, but the breadth seldom exceeds 8 feet, and even this space is produced by artificially extending the sides after the trunk has been hollowed. They carry from 50 to 60 rowers. . . . The rowers are severally provided with a sword and a lance, which are placed by his side whilst he plies the oars. Besides the boatmen there are usually thirty soldiers on board, who are armed with muskets : thus prepared they go in fleets to meet the foe, and, when in sight, draw up in line, presenting their prows to the enemy. Their attack is extremely impetuous ; they advance with great rapidity and sing a war song . . . they generally endeavour to grapple and when that is effected, the action becomes very severe. . . . These vessels being low in the water, their greatest danger is that of being run

¹ *Hmannan*, trans. *JSS*, vol. v, p. 74.

down by a larger boat striking on their broadside, a misfortune which the steersman is taught to dread, and to avoid, above all others. The rowers are also practised to row backwards, and impel the vessel with the stern foremost ; this is the mode of retreat, by means of which the artillery still bears upon their opponent.”¹

¹ Michael Symes, *An Account of an Embassy to the Kingdom of Ava, in the year 1795*, London, 1800, pp. 320 f.

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149
- Weapons, Dong-So'n, 4, 20, 21,
28, 45
Wen, 28, 102
Wild Wa, 13
Wind, omens from, 137 f.
Women in war, 3, 11, 15, 17 ff.,
47, 89, 105, 135, 142
- Yantras*, 132 f., 150
- Zones, eastern and western, 54

PLANS OF BATTLE ARRAYS

FIGURE 1

THE JAVANESE *MAKARA VYŪHA* (*MAKARA ARRAY*) (see page 51)

As reproduced by Raffles in his *History of Java* from a Javanese MS., and said to have been used in the Mataram war.

1. Mantris.
2. Senāpati.
3. Princes and relatives of the Sovereign.
4. The Sovereign.
5. Pangiran Adepati (Heir Apparent).
6. Pini Sepuh elders of Rank.
7. Bupati Bumi.
8. Wadana teng'en.
9. Mantris of the Sovereign.
10. Bupati Mancha nagara.
11. Wadana Kiwa.
12. Mantri Katang gung.
13. Majegan.
14. Prajurit or Troops of the Senāpati.
15. Prajurit or Guards of the Sovereign and Heir Apparent.

The left wing was commanded by the Panambahan of Madura, and the right wing by the Regent of Surabaya.

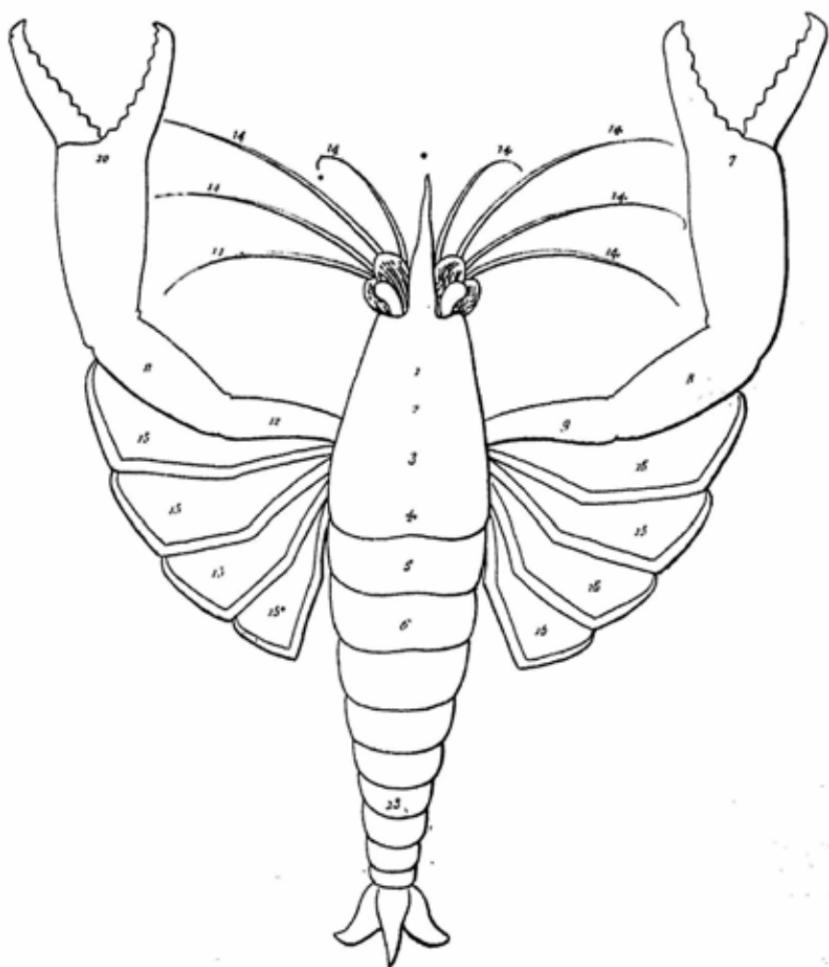


FIG. 1.—Javanese *Makara vyūha*, *makara array*.

FIGURES 2-7

OLD SIAMESE BATTLE ARRAYS

(see pages 158-9)

Traced from photographs of illustrations in the MS. *Tāmra P'ic'āi Sōngk'ram* (*Treatise on the Art of War*), numerals being substituted for the Siamese designations of the components, in accordance with the following key :—

1. Commander-in-chief.
2. Main army.
3. Foot guards.
4. Golden lance and shield bearers (cf. Srivijayan golden lance bearers, p. 44).
5. Infantry (weapons unspecified).
6. Infantry, with bows, crossbows, firearms (handguns or muskets), spears and swords.
7. Infantry, armed with spears.
8. Infantry, armed with spears and swords.
9. Infantry, armed with shields and swords.
10. Archers.
11. Cavalry (of right or left according to position).
12. Cavalry, armed with swords.
13. Elephants.
14. Elephant lancers.
15. Vanguard.
16. Rearguard.
17. Reserves.
18. Firearms, probably cannon.
19. Cannon.
20. *Ratha*, which here must mean carts (in Fig. 7B only).

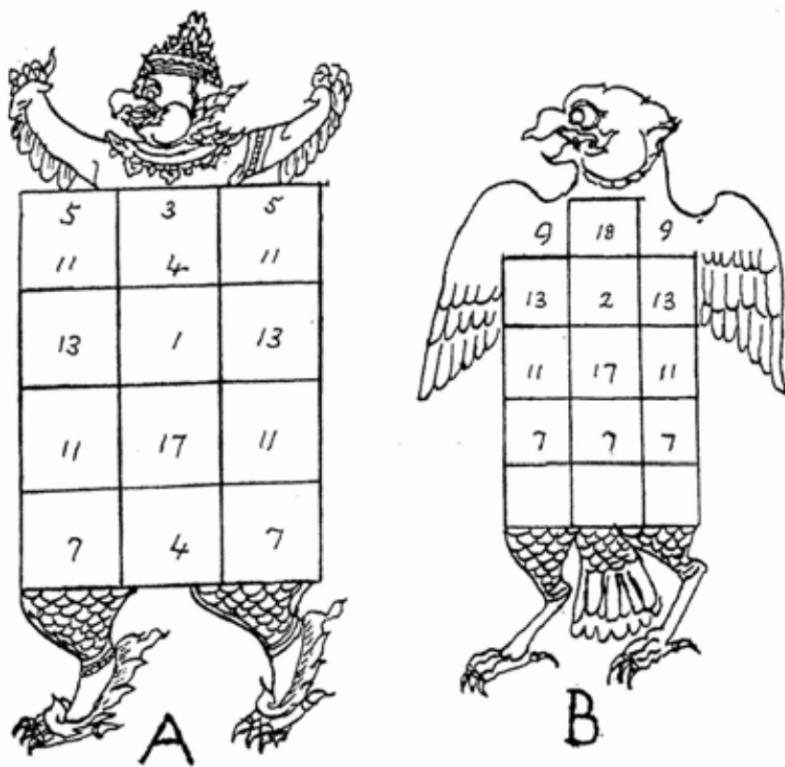


FIG. 2.—A, *Garuda vyūha*, *Garuda* array; B, *Śyena vyūha*, eagle array. (Siamese.)

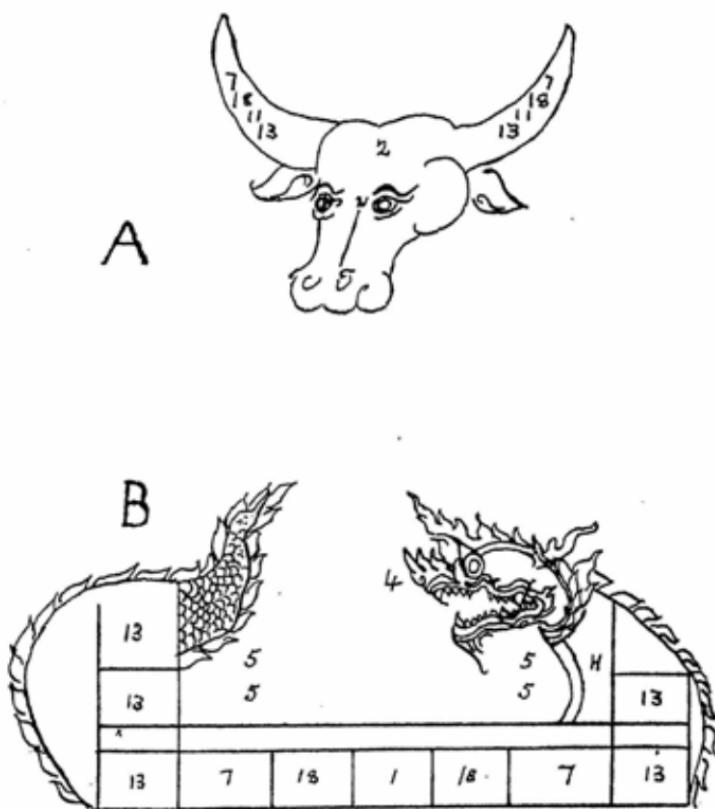


FIG. 3.—A, *Mahimsa vyūha*, buffalo array ; B, *Makara vyūha*, makara array. (Siamese.)

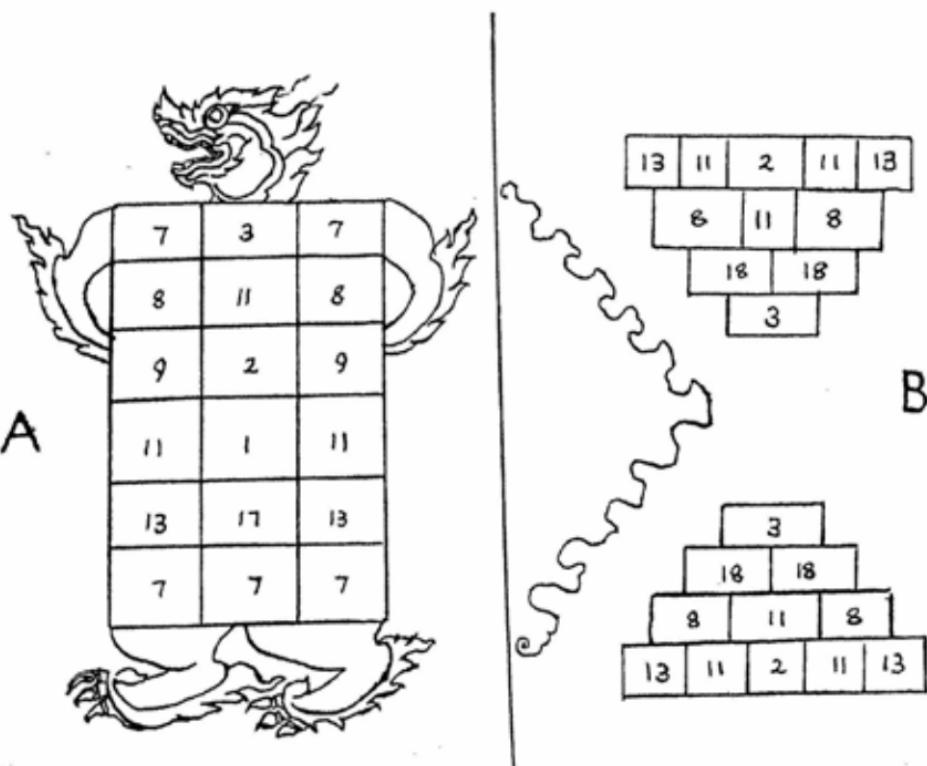


FIG. 4.—A, *Singha vyūha*, lion array ; B, Nameless array. (Siamese.)

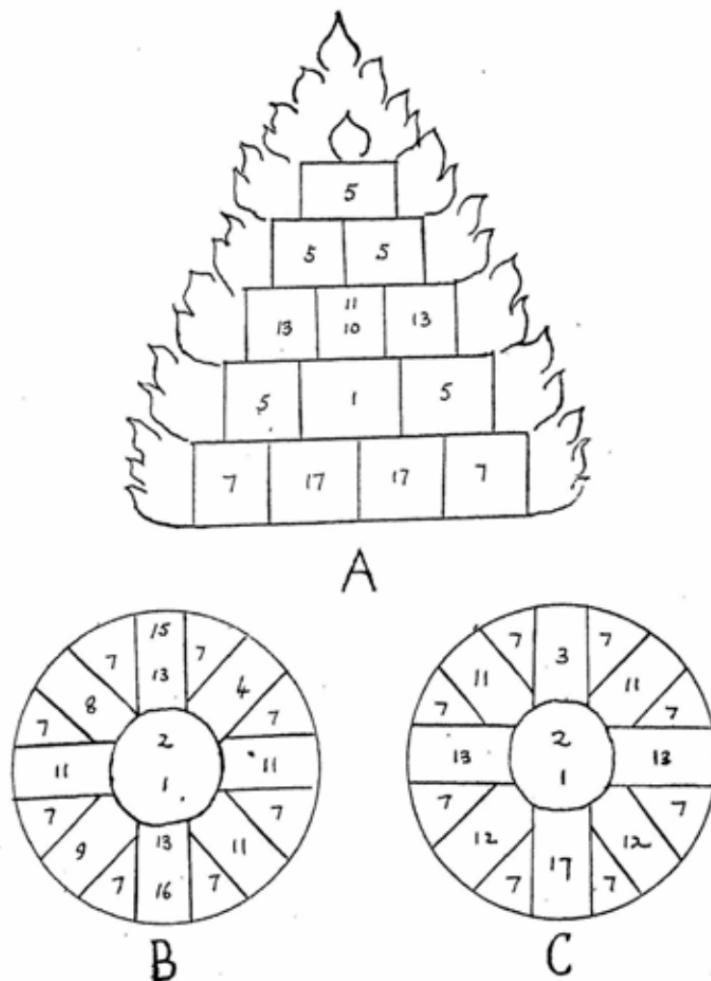


FIG. 5.—A, *Padma vyūha*, lotus array, said to have been used by King Naresuen in A.D. 1592 (see page 174); B, C, *Cakra (a)* and *Cakra (b) vyūha*, circle array. (Siamese.)

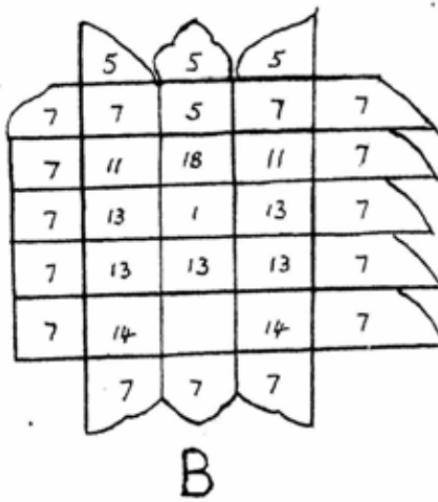
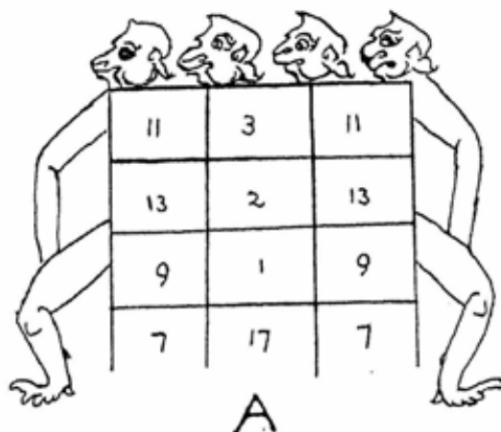


FIG. 6.—A, *Prēta vyūha*, demon array ; B, *Krod vyūha*, sharp or powerful array. (Siamese.)

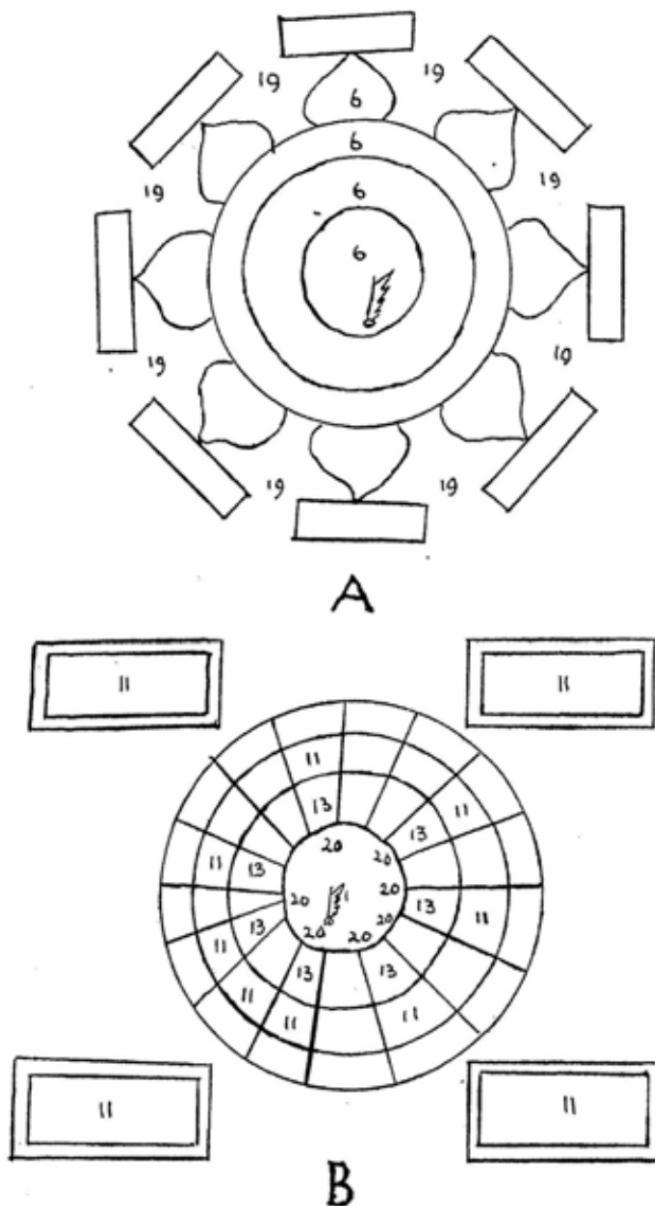
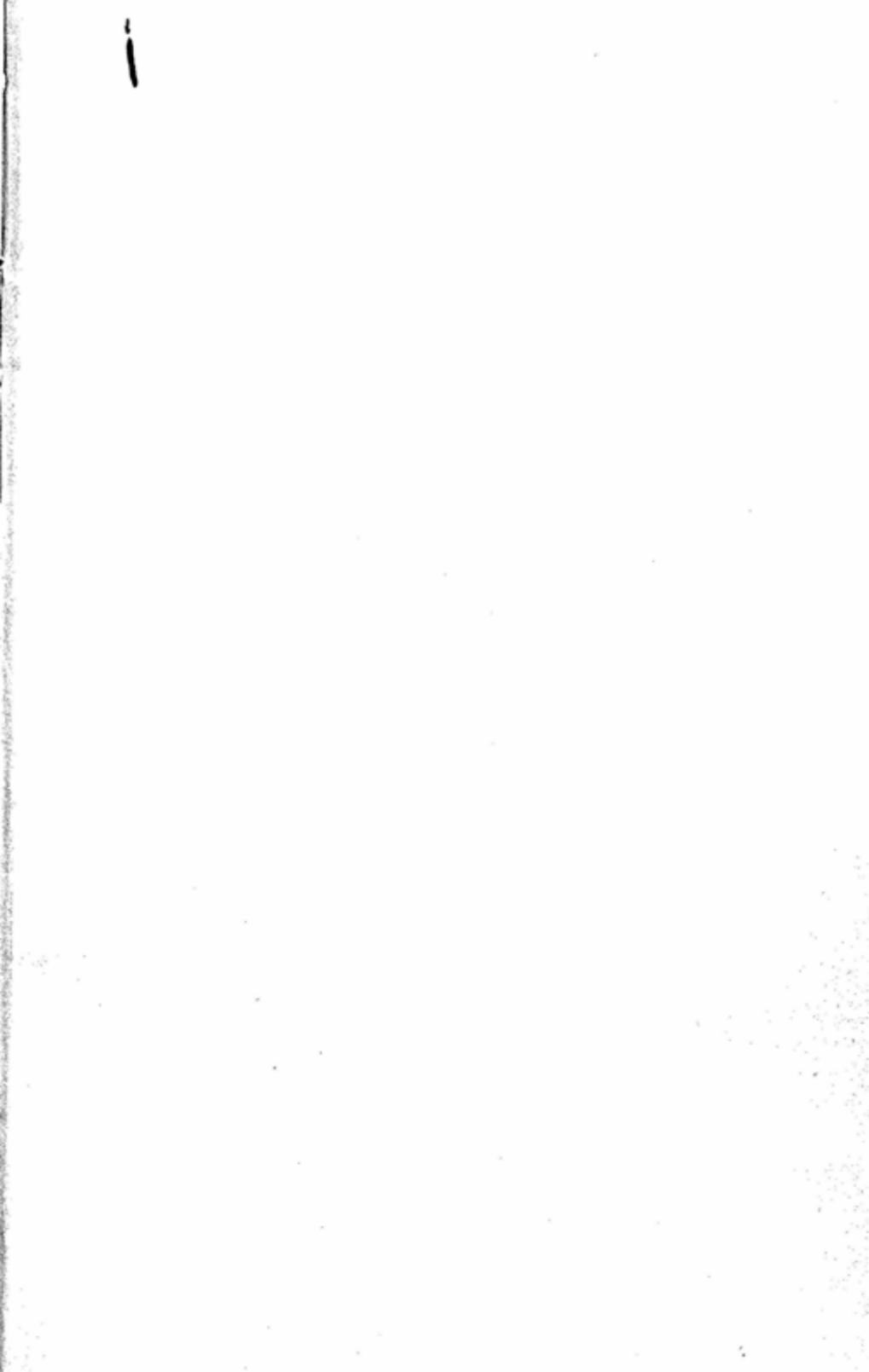
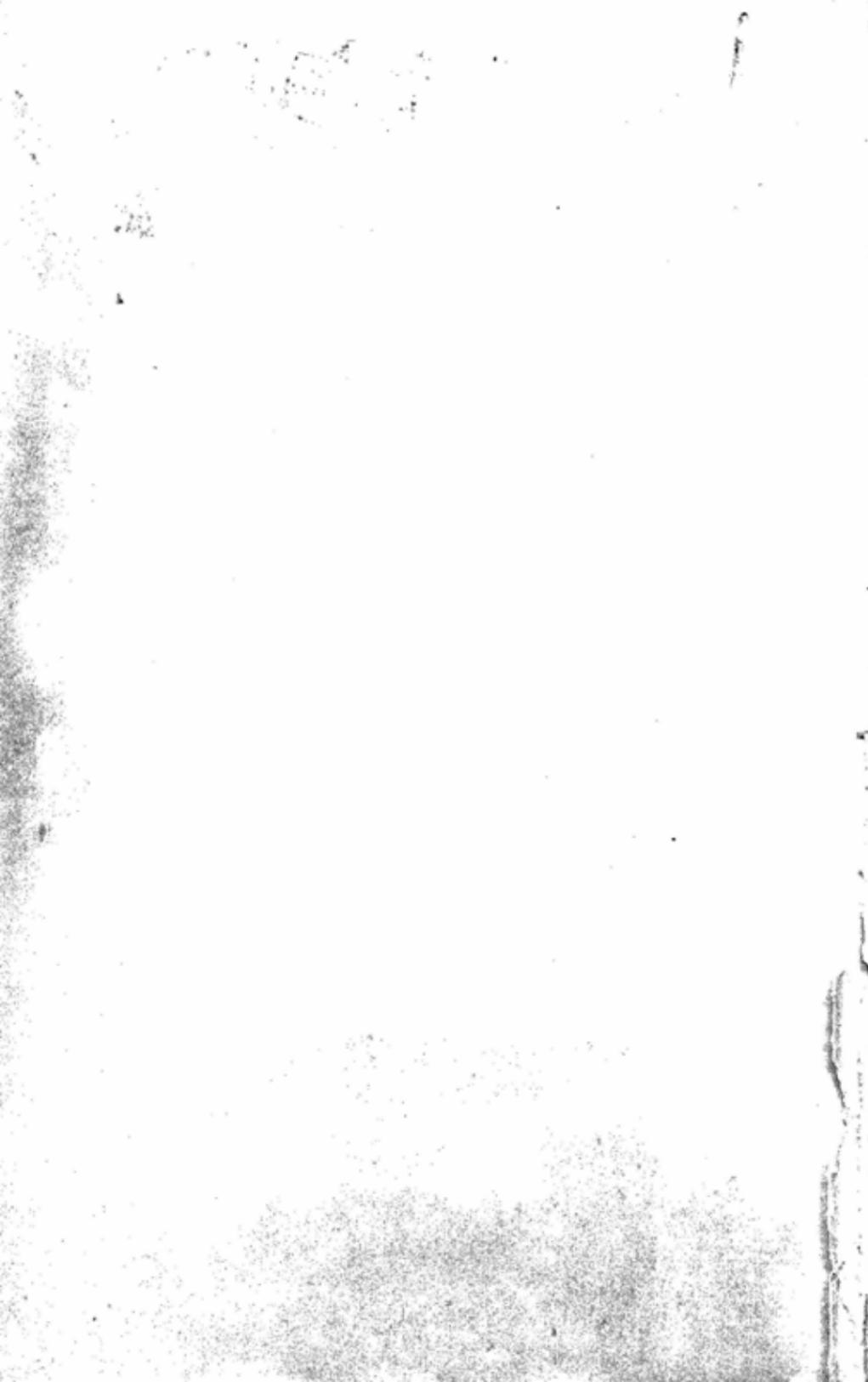


FIG. 7.—A, *Suryā vyūha*, sun array; B, *Sahasrāniśu vyūha*, 1,000-rayed array. (Siamese.)





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